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## Tongariro/Taupo Conservation Management Strategy

2002 - 2012

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## This strategy is dedicated to Hemi Kingi 26 August 1944 - 9 April 2001

Hemi was a colleague, teacher and dreamer. Many of the kaupapa within this document owe their strength and direction to him, and from this his colleagues and kaitiaki in conservation will achieve enduring protection of those values we hold dear.

Beyond this document we all remember Hemi in our conservation work.

Arohanui

## Foreword

A conservation management strategy is a statutory document, prepared in accordance with part IIIA of the Conservation Act 1987, which implements general policies and establishes objectives for integrated management of natural and historic resources. The conduct of activities on public conservation land can only take place in accordance with the relevant conservation management strategy.

This document, the Tongariro/Taupo Conservation Management Strategy, sets out the Department of Conservation's management directions for Tongariro/Taupo Conservancy for the next 10 years.

The draft strategy was made available for public comment in October 1994. 182 submissions were received. Members of the Tongariro/Taupo Conservation Board and departmental staff heard 42 submitters during formal hearings.

During preparation of this conservation management strategy the department was required to settle a Treaty of Waitangi claim which required that it give effect to the principles of the Treaty of Waitangi. With the time that elapsed during resolution of this claim, the department deemed it necessary to seek further public opinion on the document in early 2000. The strategy was revised, taking into account the further submissions received, and was formally presented to the Tongariro/Taupo Conservation Board in September 2000.

The process of developing the conservation management strategy has been as valuable as the outcomes produced. Relationships with tangata whenua and the community have been strengthened. For the first time since 1987 Tongariro/Taupo Conservancy has a clear statement of intent which will guide protection of the conservancy's precious resources into the foreseeable future.

Kerry Marshall Chairman New Zealand Conservation Authority Paul Green Conservator Tongariro/Taupo Conservancy Department of Conservation Peter Masters
Chairman
Tongariro/Taupo
Conservation Board

## Part I

# Introduction to the Tongariro/Taupo CMS



### Introduction 1.1

### 1.1.1 What is a Conservation Management Strategy (CMS)?

## **Purpose**

The Conservation Act 1987 states that the purpose of conservation management strategies is to:

"...implement general policies and establish objectives for the integrated management of natural and historic resources and for recreation, tourism and other conservation purposes..."

### **Functions**

The functions of the Tongariro/Taupo Conservation Management Strategy are:

- to provide a management umbrella for Tongariro/Taupo Conservancy activities for the next 10 years and beyond;
- to identify all public conservation lands;
- to provide management priorities for the conservancy;
- to implement clear guidelines for the management of natural and historic values;
- to give effect to the principles of the Treaty of Waitangi in managing public conservation land;
- to give the community at large an opportunity to effectively contribute to the management of public conservation land.

## Scope and Authority

The Tongariro/Taupo Conservation Management Strategy covers all public conservation land within Tongariro/Taupo Conservancy and advocates for the protection of natural and historic values outside those boundaries but within the community of interest.

The strategy is legally binding on the Minister of Conservation and on the Department of Conservation.

## Relationship with Conservation Management Plans

Until the Conservation Act 1987 was amended by the Conservation Law Reform Act in 1990, the Director-General of Conservation was required to prepare management plans for all land administered by the department under the Conservation and National Parks acts.

The conservation management strategy provides a broader perspective of conservancy issues. Where required, conservation management plans establish detailed objectives for the management of resources within a given area. Conservation management plans cannot derogate from the conservation management strategy.

## 1.1.2 How to Use the Tongariro/Taupo Conservation Management Strategy

The two key components of the Tongariro/Taupo Conservation Management Strategy are conservation policy and resource description. The document is likely to be used to locate information on a specific policy, such as fire suppression or landscape restoration, or a specific site (for example, Pokaka Scenic Reserve, Tongariro National Park).

The conservation management strategy is divided into six parts:

**Part I** Introduces the conservation management strategy, what it is and how to use it.

Part II Identifies the statutory basis for conservation management. Focuses on the key principles for management of natural and historic values and on the Maori ethic for conservation management. Includes a conservancy overview.

Part III Sets out the conservation policy for the conservancy. Contains specific policies for each of the conservancy's functional outputs (for example, protected species and historic resources). Details the methods of implementing objectives for each functional area.

Part IV Describes in detail the conservancy's resources. Lists the broad management objectives for each of the conservancy's four 'places' (Taupo Basin, Kaimanawa-Moawhango, Tongariro-Ruapehu and Plateau Forests) and outlines, site by site, all public conservation land within these places.

Part V Appendices.

Part VI Bibliography/Glossary/Index.

The strategy is designed to link sites (part IV) with appropriate management objectives (part III). It is important to use these two parts of the document together.

For policy information see part III in the table of contents or refer to the index in part VI.

## For site information:

- 1 Refer to the alphabetical listing of all public conservation land in the land inventory index, part IV.
- Beside each site name is a conservation unit number. Records in the land inventory are arranged numerically. The conservation unit number is found at the top right-hand of each record.
- 3 The appropriate land inventory sheet indicates which management place the site is part of and which map it can be found on.
- 4 This information can be cross-referenced with part IV which describes the relevant place and the department's broad management objectives for that place.

## 1.1.3 Implementing the Conservation Management Strategy

The conservation management strategy must be interpreted and implemented. It will also be adapted as new evidence and information become available and new perspectives on management are formed. The acquisition of further protected areas may later affect conservancy priorities. Circumstances will change as management programmes proceed.

The objectives expressed in the strategy will not be implemented uniformly or in any one year. Implementation of some objectives will take longer than the statutory tenyear focus of the strategy.

There are a large number of strategies and guidelines prepared by the department. These are produced at a range of different levels and are implemented similarly. The conservation management strategy directs the preparation of these documents within the Tongariro/Taupo Conservancy. These may include documents such as the weed pest strategy, consultation protocols or *He Kaupapa Rangatira*. These documents must be consistent with the conservation management strategy and provide a level of detail and guidance that allows the physical implementation of the conservation philosophy reflected in this document.

This section sets out provisions to ensure that:

- intentions set out in the strategy are pursued; and
- objectives and implementation statements remain relevant, reflect the most upto-date information available on natural and historic values, and are effective.

### (a) **Business Planning**

The strategy is 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 twelve-month period from 1 July to 30 June and serves as a financial contract between the department and the Minister. The business plan determines conservation work priorities and allocates staff time

and money for the coming year. It must accord with national priorities and the direction of Government.

Within the overall direction set by the conservation management strategy, annual business plans will detail the relative allocation of effort and funds to various objectives and outputs. There is an auditable trail from the strategy through the business plan and project management sheets to on-the-ground effort, expenditure and conservation achievement.

Expenditure should not take place outside the priorities set by the strategy. If significant expenditure is to be made outside of or in conflict with conservation management strategy objectives the strategy is required to be reviewed or amended in terms of sections 17H and I of the Conservation Act 1987.

## (b) Monitoring

Monitoring will be carried out to ensure that the strategy is implemented effectively, that the provisions of the strategy are current and that they are best serving the interests of conservation.

Section 6M(c) of the Conservation Act 1987 establishes one of the functions of the Tongariro/Taupo Conservation Board as:

"...to advise the New Zealand Conservation Authority and the Director-General on the implementation of conservation management strategies...".

The board will have the opportunity to review progress in achieving the strategic objectives and implementation provisions prior to advising on future activities.

Other agencies have an interest in the implementation and monitoring of the conservation management strategy. Regional councils and other Government departments, for instance, have jurisdictions that mean there must be mechanisms for ongoing consultation and negotiation over progress.

Of particular note are the interests of iwi. The implementation of the strategy will progressively give substance and meaning to the evolving partnership which must underlie the commitment of the Conservation Act 1987 and this strategy to give effect to the principles of the Treaty of Waitangi.

## (c) Reviews and Amendments

Processes for review and amendment of the strategy are provided for in sections 17H and 17I of the Conservation Act 1987. The procedures for review and amendment are the same as those for preparation and approval of the strategy as set out in section 17F.

A review of the strategy as a whole or in part may be initiated at any time by the Director-General after consultation with the Tongariro/Taupo Conservation Board. The strategy as a whole must be reviewed not later than ten years after its approval, unless the Minister extends this period.

Amendment of the strategy may be initiated at any time by the Director-General after consultation with the Tongariro/Taupo Conservation Board. amendment must be carried out in accordance with section 17F of the Conservation Act 1987. Where a proposed amendment is of such a nature that the Director-General considers that it will not materially affect strategy objectives or policies, a more simple process may be used. In this case paragraphs (k) and (p) of section 17F will apply and no formal public consultation will be required.

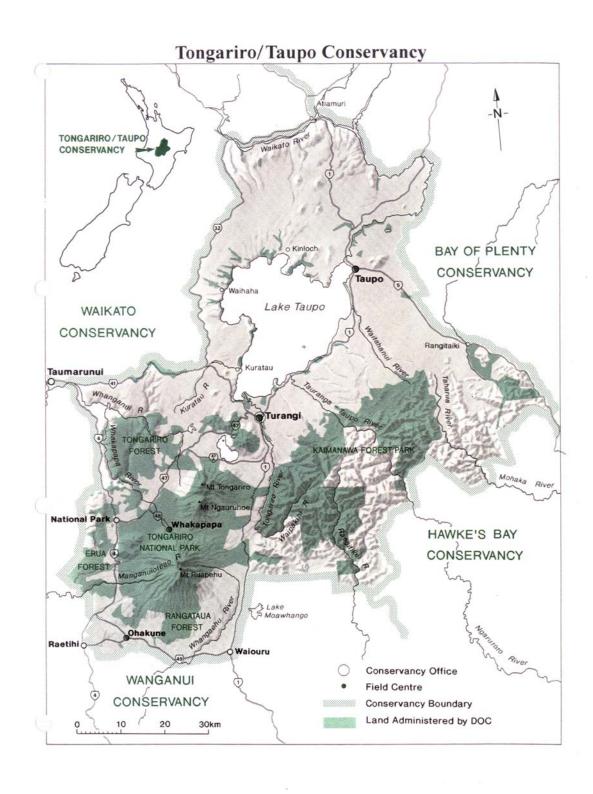
## **Objectives**

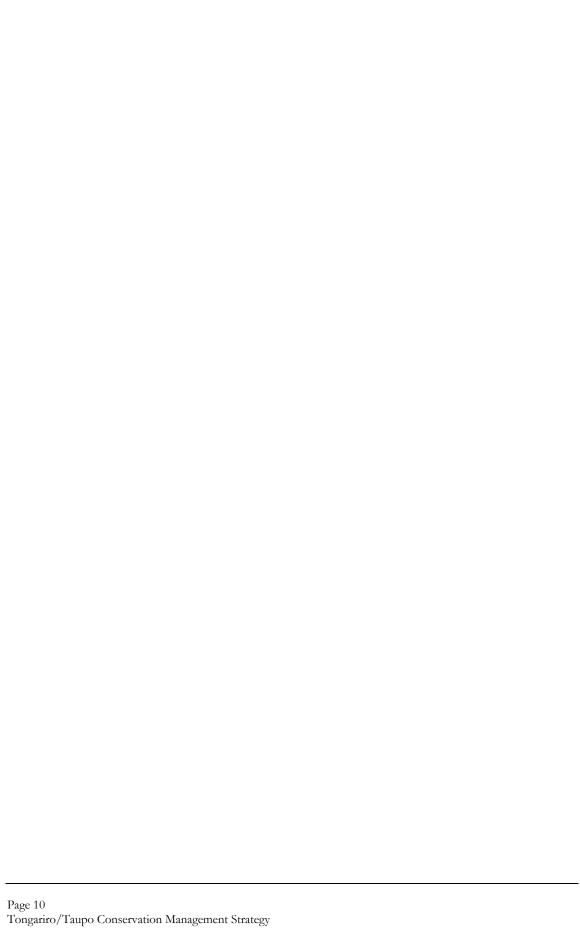
- To ensure that the objectives and implementation provisions of this strategy are incorporated into annual business planning and conservation management plans and implemented accordingly.
- To facilitate the receipt of advice from the Tongariro/Taupo Conservation Board on planning for and monitoring of the implementation of the strategy's objectives.
- To ensure that the strategy is a current and effective policy document through ongoing monitoring and subsequent reviews or amendments.

## **Implementation**

- Annual business plans and work programmes will be prepared with regard (a) to provisions of the strategy.
- The department will report regularly to the Tongariro/Taupo (b) Conservation Board on concessions, leases and licences.
- The Tongariro/Taupo Conservation Board will meet in the second (c) quarter of the financial year to monitor performance and advise the conservator on appropriate shifts for the following financial year's business plan.
- (d) Review or amendment of the strategy will be undertaken in accordance with the Conservation Act 1987.

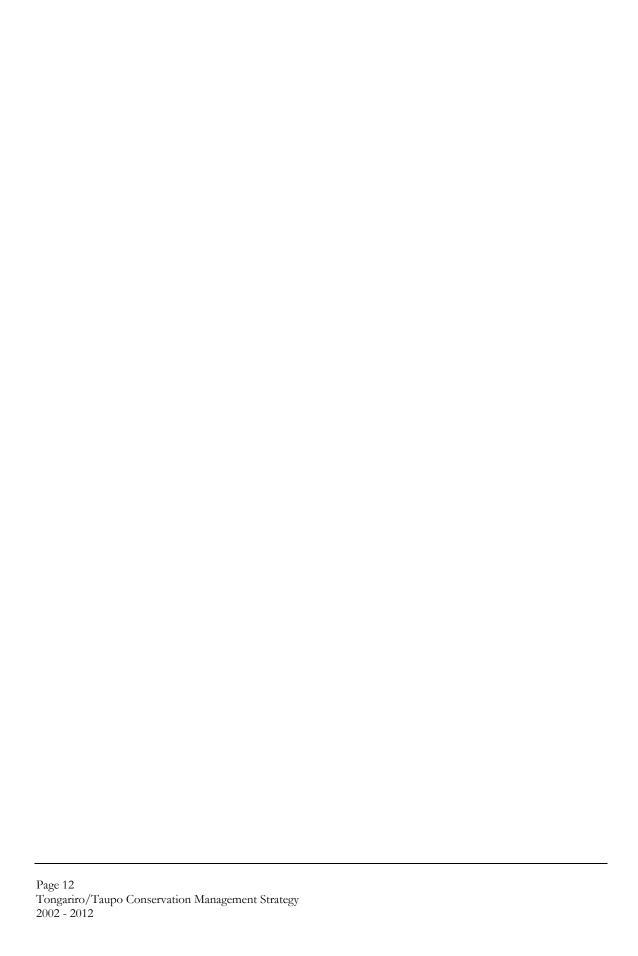






## Part II

## Conservation Philosophy



## 2.1 Key Principles for the Conservation of Natural and Historic Values in the Tongariro/Taupo Conservancy

## 2.1.1 Introduction to the Conservancy

The Tongariro/Taupo Conservancy is rich in its diversity and has a proud cultural heritage. The department is charged with the guardianship of natural and historic values on public conservation land and has an advocacy role for the protection of natural and historic values over other lands within the conservancy.

Tongariro/Taupo Conservancy encompasses the mountains, rivers, lakes and forests of the central North Island plateau, a place where the land is shaped by snow and ice and the energy of volcanic processes.

The conservancy incorporates Tongariro National Park, centred on mounts Tongariro, Ngauruhoe and Ruapehu; the conservation areas of Kaimanawa, Tongariro, Erua and Rangataua forests; and the rivers, waters and reserves of Lake Taupo. Public conservation land with inherent natural values and private land with high natural value provides a consistent ecologically sustainable fabric over the whole conservancy. Natural landscape character and ecological processes are intact. Human intervention in the natural environment has occurred for hundreds of years. Although parts of the environment have been capable of absorbing this impact, a number of sensitive areas have been irreversibly altered.

Tongariro, New Zealand's first national park, grew from the Tuwharetoa gift of its mountains to the nation in 1887. The park now hosts more visitors each year than any other in New Zealand. They come to enjoy an accessible range of recreation activities including tramping, sightseeing and skiing the country's two largest commercial ski areas

In 1988 Tongariro National Park received World Heritage Site status for its natural landscape values. In 1993, under a criteria change, the special significance of the park's mountains to the Tuwharetoa and Whanganui people was recognised. With the acknowledgement of its cultural landscape values, Tongariro became the seventeenth place in the world to achieve dual World Heritage Site status.

Flanking the national park are the Tongariro, Erua, Rangataua and Kaimanawa conservation areas. These forests attract, among others, hunters, trampers and fishing enthusiasts who come to experience the solitude and challenge of the backcountry.

Further north Lake Taupo and its tributaries provide opportunities for a range of water activities like sailing, kayaking, rafting and world-class trout fishing. Tongariro/Taupo is the only conservancy responsible for the management of a fishery.

About 1800 years ago Taupo erupted cataclysmically. An explosive cloud of searing pumice ash and gas spread across the landscape at hundreds of kilometres per hour, filling river valleys and incinerating almost all life in its path over an eighty-kilometre radius covering about one-third of the North Island. The Taupo eruption, the most destructive recorded in the world in the last seven thousand years, resulted from energy released deep beneath the earth's surface where the Pacific and Indo-Australian plates grind together.

Over the last several million years, thousands of cubic kilometres of ash, pumice and lava from the Taupo volcanic zone have built up in the southern central North Island plateau. Tongariro, Ngauruhoe and Ruapehu are all active volcanoes: Ngauruhoe, in geological terms, is very young, and fires caused by its eruptions may have complemented human-induced fires to prevent the surrounding forest from growing back to the natural bushline.

By the time humans arrived in the Tongariro/Taupo region the forests had recovered from Taupo's massive eruption. Podocarp and beech covered all but wetlands and the areas around Tongariro and Ngauruhoe and the forests were alive with an abundance of wildlife which is hard to comprehend today. The arrival of humans brought about massive change. Even before the first Maori left the coast and ventured inland, the impact of introduced animals was felt by native species. A second wave of extinctions occurred as birds such as the moa and the New Zealand eagle were hunted and a third as the forests were burned to make way for farming and exotic forestry. New plant and animal pests placed further pressures on native flora and fauna and led to further extinctions. This region, prior to human settlement, supported the kakapo, kokako, piopio, saddleback and stitchbird: it does no longer. Populations of once common species such as the kaka, robin, kiwi, pukeko and the native bat have also been greatly reduced.

The natural and human shaping of Tongariro/Taupo continues to create the issues which face us today. Fire remains a constant threat, as do animal pests such as deer, goats, possums and wasps, and plant pests, particularly old man's beard, marram grass (Ammophila arenaria), gorse, heather (Calluna vulgaris), broom (Cytisus scoparius) and Pinus contorta. The environment is subject to the impact of several large commercial businesses which operate on public conservation land. Use of water by industrial, energy and development interests is a significant management issue as is the ongoing conflict between recreation and protection.

## 2.1.2 Key Management Principles

This conservation management strategy describes how the department will protect the natural and historic values of Tongariro/Taupo Conservancy into the forseeable future. It is founded on a clear philosophy which, following extensive consultation, has been endorsed by the community, iwi and the Crown. The strategy requires policies which stem from that philosophy and provide clarity to those who wish to interact with natural and historic resources, whether the interaction is at a simple aesthetic level or on a significant commercial scale.

Following extensive community input the department sets out the key principles on which the policy within this conservation management strategy is based. These principles set the policy framework for the next ten years and articulate the significant achievements expected in conservation management over the next fifty years. The strategy and its policies have measurable outcomes and the community will continue to contribute to these outcomes.

Feedback from the local, regional and national community, from iwi within the conservancy and from the department's key associates, identifies that our management of precious resources should be conservative or precautionary in favour of those resources. The global experience, which we are in a strong position to learn from, supports this approach.

It is important that the principles are read in their entirety and that interpretation of them is undertaken with the policies that follow in part III of this document.

## Principle 1 Protection and Enhancement of the Natural Environment within the Conservancy

Highest priority will be given to retaining and restoring natural biodiversity and protecting threatened indigenous natural resources within the conservancy.

The protection of threatened resources will be based principally on the maintenance of viable ecosystems and habitats on which they depend. A diverse range of natural ecosystems provides greater opportunity for species, communities and processes to survive. Concern for diversity includes geological landforms, soil, landscape and other natural features in addition to the more traditional concern for plant and animal species. The department will also protect diversity in terrestrial and freshwater ecosystems.

Protecting ecosystems from the threats of fire, animal and plant pests will remain high priorities.

## Through the decades towards the year 2050 the department will:

- reintroduce native species which have disappeared from the region;
- successfully manage presently threatened species and their habitats so that they are no longer in danger;
- restore critical self-sustaining processes to high priority ecosystems, terrestrial or aquatic;
- eliminate or control the major plant pests currently known from public conservation land;
- have strategies to eliminate or control currently unknown plant pest threats as they occur;
- manage significant predator and competitor populations to remove risk to threatened species;
- manage the rainbow trout fishery consistent with legislative requirements;
- ensure that monitoring and research supports managers in decision making;
- remove from public conservation land past developments which no longer fulfil
  their original function, have no conservation function or are a threat to
  indigenous natural values;
- give greater protection to the region's wild and scenic rivers, lakes and other natural water bodies, to maintain their intrinsic values, natural water quality, flows and aquatic ecosystems.

## Principle 2

## Protection of Historic Resources where they are Managed by the Department

The historic resources to receive highest protection priority are those with unique cultural or scientific value and high representative status.

## Through the decades towards the year 2050 the department will:

 identify and conserve the key historic resources on public conservation land and, for other land, encourage the identification and protection of key historic resources by co-operating with others including tangata whenua, district councils and the Historic Places Trust.

## Principle 3

## Development of an Effective Conservation Partnership with Tangata Whenua

Section 4 of the Conservation Act 1987 states that:

"...the Act shall so be interpreted and administered as to give effect to the principles of the Treaty of Waitangi..."

The department's role is to manage this land on behalf of all people but with particular recognition of the Crown's principle of partnership with tangata whenua (section 3.7).

## Through the decades towards the year 2050 the department will:

- actively give effect to the principles of the Treaty of Waitangi;
- fully express and maintain an effective relationship with iwi;
- recognise and provide for the mana and spiritual value of the tops of the volcanoes of Tongariro National Park maintaining their pristine nature;
- assist in the resolution of any outstanding Treaty of Waitangi issues within the region relating to public conservation land;
- operate protocols to facilitate the relationship between the Crown and iwi on conservation management issues focused on conservation outcomes;
- provide for an expression of iwi values in the management of conservation resources.

## Principle 4

## Fostering Recreation Use of Public Conservation Land

The conservancy is comparatively small in area but its land, lakes and rivers provide for the full range of recreation opportunities, from urban to the remote end of the spectrum.

The opportunities available on public conservation land attract almost 3.5 million visitors per annum. The department is the largest tourism facilities operator within the region with a network of tourism infrastructure which assists in the provision of information to the public and the advocacy of conservation or enhanced public access for enjoyment of natural resources. At sites such as Huka Falls, with 900,000 visitors per annum, and Whakapapa village with 1,000,000 visitors per annum, the department manages multimillion dollar infrastructure investments and interacts with visitors from throughout the world on a daily basis.

There is intense visitor pressure on public conservation land at a number of key sites within the conservancy. The public have a right of access to this land and its use and enjoyment engender support for conservation. But it is important not to allow

degradation of the visitor experience through overuse or threats to natural or historic values. Natural quiet – that is an environmental state around which external influences (for example infrastructure, noise or significant visitor numbers) are minimised in order to provide for a visitor experience which is unencumbered by outside influences – must be considered. Degradation of natural and historic resources beyond the current limits is the department's principal concern. Providing experiences without exceeding social or physical carrying capacities is a high management priority.

Commercial recreation concession holders can enhance the experience of visitors. Concessions (other than those involving development of overnight accommodation infrastructure or significant adverse effects on the environment) which assist in the protection of natural or historic resources, do not cause significant conflicts with other visitors to an area and contribute to the conservancy's recreational opportunities are seen as an appropriate use of public conservation land.

The pressure from concessionaires to develop sites with infrastructure is strong. Except in terms of existing legal agreements further construction of infrastructure to increase bednights on public conservation land will not be permitted. To do so would encourage the further loss of conservation values. The department will continue to maintain and upgrade its existing conservancy-wide hut network to provide for backcountry visitor use. This will not provide for an increase in bed numbers beyond existing levels at specific sites. Where co-location by recreation concessionaires is appropriate the department will initiate this.

## Through the decades towards the year 2050 the department will:

- maintain the right of free access on public conservation land while continuing to protect natural and historic values;
- through a good working relationship with visitors, including concessionaires and the wider tourism industry, establish limits to growth of recreational developments of the type that require substantial infrastructures;
- manage use of public conservation land to minimise adverse impacts;
- move non-essential visitor facilities from public conservation land wherever possible, i.e., facilities which do not provide for recreation opportunities consistent with the protection of natural areas, facilities which create unacceptable environmental, social, physical and visual impacts, and those which contribute to an oversupply of facilities for a particular recreation opportunity in terms of the conservancy's recreation opportunity spectrum;
- by 2010 investigate the need for a walking track around Lake Taupo and, if consistent with the criteria for supply of recreation facilities, implement development of this track in conjunction with other agencies, organisations and landowners.

## Principle 5

## <u>Limiting Non-recreation Commercial Use of Public Conservation Land</u>

There is a strong demand from the national and international business community to use conservation resources in a range of ways. Examples include international film productions utilising scenery for backdrops, use of high points for telecommunication utilities or the provision of easements for access to privately held sites.

These uses can be compatible with the primary purpose for which the land is set aside where the effects are minor, both in terms of natural and historic values, or where impacts on visitors are minimised. At times it is not possible to reduce or mitigate the effects of these activities to an acceptable level and they will not be permitted on public conservation land. An essential requirement of any of these activities occurring on public conservation land is that they cannot reasonably be undertaken elsewhere.

## Through the decades towards the year 2050 the department will:

- ensure non-recreation commercial concessions are only granted where they do not adversely affect the primary values of public conservation land or their effects can be avoided, remedied or mitigated;
- ensure non-recreation commercial concessions are only granted where they cannot reasonably be undertaken at sites off public conservation land;
- grant non-recreation commercial concessions only where appropriate mitigation at the site and public conservation works are undertaken to offset the loss of natural values that occur;
- decline applications by concessionaires where infrastructure requirements increase the scale or impact of structures on the physical landscape.

## Principle 6

## Enhancing Advocacy Outcomes and Community Relations

The department has a statutory function to advocate for protection of natural and historic values.

Within the conservancy the destruction of indigenous flora and aquatic habitats along with the potential degradation of historic resources are key issues that require advocacy. The department works closely with local bodies and community agents to achieve its advocacy goals.

Community involvement in conservation and education about conservation are key requirements for the protection of natural and historic values into the future.

## Through the years toward 2010 the department will:

- develop a strong advocacy role for conservation issues throughout the region;
- increase the amount and variety of conservation education within the region;
- develop a greater awareness in both locals and visitors of conservation issues;
- heighten community awareness through statutory and education processes of the adverse effects that activities like the disturbance of aquatic ecosystems and the removal of indigenous vegetation have on natural and historic values;
- contribute to the development of roles for volunteer/community/school group involvement throughout the conservancy.

## Through the decades towards the year 2050 the department will:

- achieve the protection of indigenous aquatic and terrestrial ecosystems of high value within the conservancy;
- work with key agencies within the district to restore ecosystems to provide for natural processes and community well-being.

## 2.1.3 He Tirohanga me te Whakakitenga A Iwi mo Tongariro/Taupo a te Tau 2010

### He Whakatauki - A Proverb

Ki te kahore he whakakitenga, ka kore te iwi e tupato (Where there is no vision, the people perish)

[Holy Bible, the Book of Proverbs, chapter 29: verse 18]

## (a) Whakatuwheratanga - Introduction

E kī nei te karaipiture he mea waiwai te whakakitenga hei whakaū i te haere tonu o te oranga o tētahi iwi me a rātou tikanga tuku iho. Nā runga i tona tūranga tangata whenua i noho ai te Maori hei iwi ahurei i roto i nga iwi whānui o te motu, ā, he mea waiwai kia whiwhi rātou i tētahi whakakitenga e tika ana, i te mea i puta ake āna tikanga tuku iho i tenei whenua i tau ai ki a rātou te aronga e kore nei e hipaina, o te noho kotahi me te katoa o te taiao.

I poua tenei i runga i te mōhio tūturu, arā, i poipoia i whakapakaritia nga tikanga tuku iho a te Maori i Aotearoa-Niu Tireni nei. Koia tenei tōna toi whenua tūturu. Kei whenua kē nga paiaka o ērā o nga iwi, ā, kei reira tonu e ora ana, e rangatira ana nga reo, nga whakapono me nga kōrero tūpuna a aua iwi.

Nā runga i ēnei pūtake i whiriwhiria ai e te Maori, āra, me whakawhaiwāhitia te whakakitenga papa atawhai e tika ana, ki a rātou tikanga tuku iho. Nā te mea hoki, pērā i ō rātou tūpuna o mua, kei te tiaki tonu rātou i te āhuatanga o te noho tūhonohono nga mea ora katoa o te ao. Otirā, tērā ano ētahi o nga iwi kē o Aotearoa-Niu Tireni nei e mau ana ki te kaupapa tūhonohono nei, ā, nā reira i kore ai e taea te kī he kaupapa whakawehewehe, whakawāwāhi tenei tū tirohanga a te Maori. Kāti, ko tā te tuhinga nei he whakaatu poto atu i ētahi whakawhitinga whakaaro whānui, inā whakatōpūtia ana, koia tēnā te whakakitenga tūhonohono a te Maori mō te papa atawhai o Tongariro/Taupo mō te tekau tau e heke mai nei.

As the scripture implies, vision is essential for the ongoing survival of a people and thus their culture. As tangata whenua and a unique society within the broader society, it is imperative that Maori have an appropriate vision because the indigenous character of their culture gives them an unsurpassable sense of belonging in relation to the total environment.

This is established on the fact that the Maori culture was nurtured and developed here in Aotearoa-New Zealand. This country is its natural habitat. The Maori perspective is that other cultures have their roots elsewhere where their language, beliefs and traditions survive and prosper.

For these reasons Maori consider that an appropriate conservation vision must also be seen in the context of their culture. That is because, like their forbears before them, they continue to maintain a totally holistic world view of life. There are a great many non-Maori New Zealanders, however, who also subscribe to the holistic view and therefore the Maori view is neither separatist, nor divisionary. This statement then will briefly outline a number of broad considerations which, when taken together, comprise a holistic Maori vision for the Tongariro/Taupo Conservancy in the decade ahead.

## (b) Tangata Whenua - The People of the Land

Ko nga iwi e mōhiotia nei ko Ngāti Rangi, Ko Ngāti Tuwharetoa me Ngāti Tahu nga tāngata whenua o te papa atawhai o Tongariro/Taupo. E nohoia ana e Ngāti Rangi te takiwā ki te tonga o te papa atawhai, ko Ngāti Tahu kei te takiwā ki te pā whakarua. Kei waenganui i ēnei takiwā (ka rere pērā atu te uru, ki te uru mā raki me te rāwhiti o nga pae o te papa atawhai) ko te rohe tupuna o nga hononga hapū o Ngāti Tuwharetoa iwi.

The tangata whenua (indigenous people) of the Tongariro/Taupo Conservancy are the iwi (tribes) known as Ngati Rangi, Ngati Tuwharetoa and Ngati Tahu. The Ngati Rangi people occupy the southern reaches of the conservancy and the Ngati Tahu people, the north-eastern reaches. Between these points (and extending to the western, north-west and eastern boundaries of the conservancy) lies the ancestral domain of the kindred hapu (sub-tribes) of the Ngati Tuwharetoa people.

## (c) Te Ao Tawhito - The Old World

Mō nga rau tau tini e noho motuhake ana ēnei iwi hei kaitiaki mō te katoa o te taiao o ō rātou ake rohe, mai i a Ranginui ki runga ki a Papatūānuku ki raro. He mea kia whakahōnoretia, kia manaakitia e rātou nga rohe taiao, nā te mea, ki a rātou nei hoki he wāhi noho no nga atua, ā, he taonga, nga maunga, nga ngahere, nga roto me nga awa. Nā te mea i puta mai i aua wāhi nga taonga māpuna ka kīa aua wāhi he wāhi tukutaonga. Hei tauira: Kei nga maunga me nga ngahere hei kai, hei rongoā, ko nga momo manu pēnei i te tītī me te kererū, ka uru mai nga momo otaota pēnei i te pikopiko me te komata; te koromiko me te karamū. I te wā i tīmata ai te Pākehā ki te taetae mai, e whakamahia ana nga rawa puia, ā, e makuru ana te whenua i te rawa.

For centuries these iwi were the sole custodians in their respective rohe (regions) of the total environment from Ranginui ki runga (Rangi of the heavens above) and Papatuanuku ki raro (Papa the earth mother below). They revered and respected the environmental domains because they saw the mountains, forests, lakes and rivers as the domains of atua (deities), and as taonga (treasures). As wahi tukutaonga (resource yielding domains) all yielded prized resources. For example, in the mountains and forests were birds and fowl (titi and kereru) and flora (pikopiko and komata, koromiko and karamu) for food and medicinal purposes. Geothermal resources were fully utilised as were many other resources also in abundance at the beginning of European colonisation.

## (d) Tiakitanga - Custodianship

I roto i nga tikanga tuku iho e pā ana ki te tiakitanga o Te Ao Turoa ko te kaupapa papa atawhai a te tangata whenua, ā, i whakamahia tētahi wahi o aua kaupapa mā roto mai i nga karakia o te kawa me nga karakia tikanga pure e tika ana. I hangaia ēnei tikanga hei manaaki i te mauri o nga taonga me nga rawa o te taiao. Mā te whakarato i nga kaupapahere hei whakarite i nga ritenga, māna hei whakakaha nga tikanga o te kawa me nga karakia. Ko ēnei, me ētahi atu tikanga pērā i te rāhui rā, nga rākau whakahaere i te taiao ko tā rātou mahi nei he whakarite mehemea, me, me pewhea, hei āwhea, ā, ki hea nga rawa hauhaketia ai, whakamahiatia ai/rānei. Ko tā te tikanga i taua wā anō he hua, ara, ka manaakitia tōtikatia, ā, e kore e takatakahia, te awe o te wairua whakamarumaru o te kawa me te karakia, tae atu hoki ki te ture o te tapu.

Ka parangia e ēnei tikanga papa atawhai tuku iho te huarahi mō te whakahaere tauwhiro me te whakamahi i nga rawa, hei hua ka pūmau tonu te haere ngātahi o te ora me te pai o te ora me te taiao me te iwi. Ko nga kaiwhakahaere o ēnei tikanga katoa ko hunga kei a rātou nga toi e tika ana, pēnei i nga tohunga, i nga koroua me nga kuia rā. I te nuinga o te wā, ko rātou te hunga nāna i hua te mahi ki te whakamarumaru, ki te atawhai me te tohu i te mauri o te taiao me ōna rawa. Ahakoa te mohio, ara, ko ratou tonu nga 'kaitango kai tuatahi' o nga rawa o te taiao, i tino momoho rawa atu te tangata whenua ki te tiaki kia āhua taketake tonu te noho a te taiao, ara, kia pērā te rite ki te wā i tae mai ai nga manene Pākehā.

Customary tiakitanga of Te Ao Turoa (the environment) involved an indigenous conservation ethic which was partly applied through the invocation of appropriate kawa and karakia (protocols and religious rituals). Such procedures were designed to manaaki (care for) the mauri (life dynamic) of the environment's treasures and resources. Tikanga (customary rules) reinforced kawa and karakia by providing governing policies to regulate ritenga (behaviour and practices). These, including other mechanisms like rahui (a prohibition), were the environmental management tools which governed if, how, when and where resources were to be harvested and/or used. At the same time tikanga ensured that the protective spiritual influences of kawa and karakia, including the law of tapu (sacred and revered law), were properly respected and not infringed.

These cultural conservation mechanisms paved the way for sustainable resource management and utilisation so as to ensure ongoing survival and quality of life for both the environment and the people. The whole process was overseen by those with the required knowledge such as tohunga, koroua and kuia (priests and male/female elders). For the most part it was they who ensured that the mauri of the environment and its resources were protected, nurtured and conserved. Despite the fact that they were primary consumers of environmental resources, the tangata whenua were successful at maintaining a relatively pristine environment through low population pressure and sustainable land use practices, such as it was at the time of arrival of the new European immigrants. Some sites, however, were impacted due to the human intervention in the environment.

## (e) Te Ao Hurihuri - The Changing World

Kua kōrerohia ake nei, kei te pūmau tonu te Maori ki te kaupapa tūhonohono i te taiao o tōna ao. I tangohia mai taua kaupapa nei i tētahi anga tikanga tuku iho a te tangata whenua, e whakaae ana, ā, e ū ana ki tenei nā, ara, e noho ū ana te here o te taha wairua, te taha hinengaro me te taha kikokiko o te koiora tangata ki te `koiora' o te taiao me te ao tukupū whānui.

I mua i te taenga mai o te Pākehā, i a te Maori ētahi kōrero tupuna no mai rā ano, e pā ana ki tana noho tahi ki te taiao me ōna rawa. I tautuhitia mai rā i te tekihana e pā ana ki te tiakitanga, nā te ū ki nga tikanga whakamahi tūroa o nga wāriu me nga tikanga pono kei roto i te anga o nga tikanga tuku iho, koia tēnei te take i taea ai. Inā whiriwhiria ana nga mea katoa, nā tēnei kōrero tupuna, e hia rau tau kē nei te roa, nāna i whakaputa te tuhinga mahi whakahaere papa atawhai kāore nei ē taea e tētahi atu te turaki.

Heoti, nō muri mai i te nohoanga tūturutanga o te Pākehā i konei, ka tīmata te ngau a āna wāriu me āna tikanga whakahaere, ā nā aua ngaunga i whakahoro te mana, nga wāriu me nga tikanga pono o te anga tikanga tuku iho, ko tā rātou mahi nei he whakamarumaru, he tohu i te taiao me te katoa o ōna pūnaha me ōna rawa. Nā te aroha kē o te tangata whenua ki te tohu i te oranga o te taiao, tena mō rātou ake, te take e hiahiatia ai kia whakaorangia te mahi a nga ngau nei, ā, kia whakahokia ki tētahi tūranga rikarika, tūranga whaimana, nga wāriu me nga tikanga pono o te anga tikanga tuku iho. Ki te tangata whenua he kaupapa atawhai ngatahi nga aronga e rua nei, arā te tiaki me tohu i te taiao, ā, e kore e taea te wehe mai ēnei i ērā o nga kaupapa papa atawhai.

As stated, Maori people continue steadfast in maintaining a worldview which is totally holistic. It is derived from an indigenous cultural framework which recognises and holds that the spiritual, intellectual and physical elements of human life are inextricably bound with the 'life' of the environment and the wider universe.

Pre-European, the tangata whenua possessed a long-standing tradition of living as one with the environment and its resources. As indicated in the section on tiakitanga, this was achieved through long-standing application of the values and principles contained in the cultural framework. This centuries-long history

produced a conservation management record second to none, all things considered.

Post-colonisation the impact of western values and administration eroded the authority, values and principles of the cultural framework in protecting and conserving the environment with all its systems and resources. For tangata whenua it is more for the sake of conserving environmental well-being than it is for themselves that the process be reversed and the values and principles of the cultural framework be restored to a place of vitality and authority. For tangata whenua both aspects are as much conservation issues as anything else.

## (f) Te Tiriti o Waitangi - The Treaty of Waitangi

Koia tenei te kõrero a te tekiona e wha o te Ture Papa Atawhai 1987: Ko tā tenei Ture he whakamārama i te tikanga, ā, he whakahaere i nga mahi mā reira nei e whakatinana nga tikanga pono o Te Tiriti o Waitangi. Hei whakatutuki i taua kõrero, he mea whakahirahira kia whakatakotohia tētahi whanaungatanga tino māhorahora, tino whaikiko i waenganui i Te Papa Atawhai me te tangata whenua, tēna rawa ia, i roto i nga mahi ahu kaupapahere, nga mahi whakamarumaru me nga mahi whakahaere i nga pānga motuhake papa atawhai me nga take e whai wāhi atu ana.

Hei āwhina i taua mahi, e manawa reka ana te tangata whenua kia whakauru atu ētahi o ā rātou tirohanga ki roto ki tenei kupu whakakitenga ka kohaina atu nei, kia noho ai hei wāhi tūturu mō te Whāinga Roa a te Hunga Whakahaere Papa Atawhai.

He mea pai anō hoki kia pānuitia tōtikatia atu ki te iwi whānui te tikanga o nga kupu nei, 'e whakatinana i nga tikanga pono o te Tiriti o Waitangi'. He mea whakahirahira te ako i te iwi whānaui kia whakaae ai rātou ki te tiriti me ōna tikanga pono, mēna rā e hiahiatia ana kia taea e te tangata whenua nga hua tōkeke, nga hua tiki māna, e ai ki nga whakaritenga papa atawhai.

Section 4 of the Conservation Act 1987 states:

"... This Act shall so be interpreted and administered as to give effect to the principles of the Treaty of Waitangi..."

In that regard it will be important to advance the establishment of more informed and effective relationships between Te Papa Atawhai and tangata whenua, particularly in policy development and the protection and management of the public conservation land with its attendant issues.

The general public will also need to be properly informed about the Treaty of Waitangi and what it means 'to give effect to the principles of the Treaty of Waitangi'. Public education and acceptance of the Treaty of Waitangi and its principles will be important if tangata whenua are to achieve just and equitable outcomes in conservation terms.

## (g) Te Anga Tikanga Tuku Iho - The Cultural Framework

Ka mārama kē atu te matatau ki nga tirohanga a te Maori e pā ana ki te whakamarumaru, ki te whakamahi me te atawhai i te taiao ki te tirohia te anga tikanga tuku iho taketake e ora tonu nei, mai i nga rau tau e hia ke nei ki muri. E whā nga Pou o te anga nei. Kua oti te tuhi ki te taha o ia pou nga tino wāriu me nga tino tikanga pono e whai wāhi ana. E hono tahi ana, e whai wāhi atu ana tētahi wāhanga o te anga ki tētahi, ā, ahakoa he aha ka pā ki te wāriu o tētahi o aua wāhanga ka pā anō ki ērā atu o te wāhanga o te anga.

Nga Pou	Nga Take
Te Ao Turoa	Whenua, maunga, ngahere, moana, awa, ahi ka
Whanaungatanga	Iwi, hapu, whanau, waka, tohatoha, whakapapa, manaaki
Taonga Tuku Iho	Kete matauranga, kawa, karakia, tikanga, ritenga, te reo
Turangawaewae	Tangata whenua, papakainga, marae, manuhiri, koha

- Te pou tuatahi (te ao turoa me te taiao): E pā ana tēnei ki te ao turoa me te taiao. Ko nga wāriu me nga tikanga pono e pā ana ki enei ko nga: maunga, ngahere, roto, awa me te ahi ka (nga ahi i tahuna hei tohu i te mana wheta whenua).
- Te pou tuarua (whanaungatanga): E pā ana tēnei ki nga hononga tangata. Ko nga wāriu me nga tikanga pono e pā ana ki tēnei ko nga: iwi, hapū, whānau, waka, te tohatoha taputapu, whakapapa me te tikanga pono o te whai whakaaro.
- Te pou tuatoru (taonga tuku iho): E pā ana tēnei ki nga taonga tuku iho. Ko nga wāriu me nga tikanga pono e pā ana ki tēnei ko: te huinga katoa o nga toi a te Maori, nga kawa, nga karakia tawhito, nga ture ā tikanga tuku iho me nga tikanga whakahaere, nga whanonga tikanga tuku iho me te āhua o te mahi i nga mahi e mahia ana me te reo rangatira.
- Te pou tuawha (tūrangawaewae): E pā ana tēnei ki nga wāhi e nohoia ana e te tangata. Ko nga wāriu me nga tikanga pono e pā ana ki tēnei ko: te tangata whenua o te whenua, nga kāinga me nga wahi kua roa kē e whetangia ana, nga tikanga o te marae, nga āhuatanga e pā ana ki te manuhiri me te tikanga o te koha.

I a rātou ka noho kaitiaki motuhake, ka hono atu te tangata whenua ki te taiao mā roto mai i nga wāriu me nga tikanga pono o te pou tuarua, ā, ki te whakamahi i ērā o te pou tuatoru mā roto mai i ērā o te pou tuawha. E tūhonohono tūmāhoehoe, takotopae, takotohōkai ana nga mea katoa.

Ehara i tēnei anake te katoa o te anga, heoti, ka nui noa atu tēnei mō nga kaupapa o te whāinga roa a te hunga whakahaere papa atawhai.

Ko tētahi tino wāhanga whakahirahira tonu o te whakakitenga a te tangata whenua, te mahi ki te whakaora mai anō i te anga tikanga tuku iho whakakotahi, ki tētahi tūranga whai tikanga, tūranga tika, tūranga tuatahi tonu i roto i nga mahi papa atawhai.

Maori perspectives on environmental protection, utilisation and conservation are better understood from the basic framework which has survived over the centuries. The framework comprises of four pillars (nga pou). The fundamental values and principles (nga kaupapa) related to each pillar are outlined alongside. There is nothing in the framework which is not linked or related and which does not have an effect on any other value in the framework.

- The first pou (te ao turoa) *deals with the environment*. Its attendant values and principles are land, mountains, forests, lakes, rivers and ahi ka (symbolic fires which established right of occupation).
- The second pou (whanaungatanga) *deals with relationships*. Its attendant values and principles are tribe, sub-tribe, family, canoe, material distribution, genealogy and the principle of caring.
- The third pou (taonga tuku iho) *deals with heritage handed down*. Its attendant values and principles are the Maori body of knowledge, protocols and conventions, ancient invocations, customary rules and procedures, customary behaviours and practices and the Maori language.
- The fourth pou (turangawaewae) *deals with places of belonging*. Its attendant values and principles are the people of the land, traditional villages and places of occupation, the institution of the marae, visitors and offerings.

When sole custodians, the tangata whenua related to the environment through the values and principles of the second pou, by utilising those in the third pou, from the position of those contained in the fourth pou. Everything links vertically, horizontally or diagonally.

It is the restoration of this integrated cultural framework to a meaningful place of appropriate priority in conservation which forms an important part of the vision of tangata whenua.



# Part III

# **Conservation Policy**



# **Public Conservation Land** Atiamuri Lake Taupo Taumarunui KAIMANAWA FOREST PAR National Park Whakapapa TONGARIRO NATIONAL PARK ERUA ( RANGATAUA Raetihi Waiouru Conservancy Office Field Centre Conservancy Boundary Land Administered by DOC 10 20 30km



# 3.1 Protection on Public Conservation Land

## 3.1.1 Introduction

The principal threats to Tongariro/Taupo Conservancy's biodiversity are fire, animal and plant pests, the increasing pressure on the natural environment by visitors and the infrastructure needs of concessionaires.

The fragmented public conservation land of Taupo Basin, Kaimanawa-Moawhango and Plateau Forests is subject to the possibility of significant impact from the activities of adjoining landowners. The department uses its statutory and community relations roles to achieve protection of natural and historic values on public conservation land. The department's high profile role in this relatively small conservancy helps achieve significant conservation goals via community contact.

Maori historic resources within the conservancy have a high degree of protection. The natural and human threats are offset to a high degree by strong awareness of Maori cultural history within the area.

There is a significant restoration programme where roading, rail, power or tourist development has occurred on public conservation land. This is undertaken on a large scale on the land abutting the Desert Road and on Mount Ruapehu, in conjunction with concessionaires. Community initiatives facilitated by the department in the Taupo Basin have seen significant annual tree planting programmes.

The department is involved in national research programmes including visitor use, possum control and kiwi. Local initiatives include research on introduced heather (*Calluna vulgaris*) in Tongariro National Park, willow control techniques in wetlands and monitoring programmes for endangered species like the short-tailed bat. A full landscape survey for Tongariro and Erua forests was completed early in the 1990s giving the department a better picture for proactive management of these areas.

The department practices an integrated approach to everyday management.

# 3.1.2 Management of Historic Resources

The department is responsible for the management of historic sites on public conservation land. Its primary role in historic heritage conservation is to ensure that historic sites are protected while allowing for appropriate public use. In some cases public use may not be in the best interest of historic heritage conservation and hence may be restricted.

The Tongariro/Taupo area has a rich Maori heritage dating back some 800 years. There are comparatively few recorded Maori sites on public conservation land. Sites are concentrated around the shore of Lake Taupo, much of which is land not managed by the department. Very little archaeological surveying has been done in the larger backcountry tracts of public conservation land.

In partnership with tangata whenua, the department manages two sites of considerable significance to Maori. These are Opepe and Te Porere, where the department undertakes management for the New Zealand Historic Places Trust. Opepe is significant in the story of European settlement of the area and both sites share in the story of Te Kooti and the New Zealand land wars.

More recent activities in the region have produced historic places associated with milling, farming, mining, communications and transport and recreation/tourism. Tongariro National Park dominates the recreation and tourism themes with features like Waihohonu Hut, New Zealand's first mountain hut.

Historic site management is guided by the principles embodied in the Aotearoa Charter, a New Zealand adaptation of the International Charter for the Conservation and Restoration of Monuments and Sites.

The *Historic Resources* map shows the distribution of known historic resources within the conservancy.

# **Objective**

• To identify and effectively manage historic places on public conservation land within the conservancy.

- (a) Historic resources on public conservation land will be managed primarily to preserve their historic/archaeological values.
- (b) Management of historic resources will be carried out according to the approved Tongariro/Taupo Conservancy Historic Resources Strategy. Priority for management will be determined by the threats to resources and representativeness.
- (c) Public access to and enjoyment of historic sites on public conservation land will be facilitated provided that this does not compromise historic and archaeological values or, in the case of sites of significance to tangata whenua, does not compromise cultural or spiritual values.
- (d) Tangata whenua will be consulted with and fully involved in management of historic resources of significance to Maori.
- (e) Waahi tapu issues will be resolved in close consultation with the appropriate iwi, taking into account the requirements for protection of waahi tapu values.
- (f) Appropriate interpretation of historic resources may be provided. Any decision to provide visitor facilities and interpretation at an historic site will not conflict with the significance or integrity of the site.
- (g) Increased awareness of historic values and resources will be encouraged in departmental staff and visitors to public conservation land.

# 3.1.3 Fire Suppression

As a rural fire authority the department is responsible under the Forest and Rural Fires Act 1977 for fire control on public conservation land. 'Fire control' includes the prevention, detection and suppression of all fires within or threatening those state areas or within a one-kilometre safety margin of all state areas.

Fire poses the single biggest threat to the natural values of Tongariro/Taupo Conservancy, with its vast areas of tussock grassland and monoao-manuka shrublands. Large areas of highly flammable vegetation on adjoining private land, especially to the south and east of Kaimanawa Forest Park, add to the risk.

The conservancy has learned to expect at least one major fire (that is, a fire covering more than 50 hectares) every two or three years. Numerous small fires occur each summer within or adjacent to the large number of reserves in the conservancy. Although, due to their local nature, most of these smaller fires can be extinguished quickly, many have the potential to develop into major fires.

Under the Forest and Rural Fires Act 1977, the department's obligation is to control all fires within or threatening public conservation land. Present legislation does not allow the department any discretion in letting some fires run and extinguishing others according to whether ignition events are anthropogenic or natural. Future policy may be modified to allow some naturally occurring fires (caused by volcanic activity or lightning) to burn out without interference where they would not threaten life or property or impact adversely on natural resources. The use of controlled fire as a management tool may also be considered to maintain specific vegetation types or to control threatening plant pest species.

This conservancy's fire-fighting resources include well-trained and experienced staff and well-maintained rural fire-fighting equipment based at field centres in Taupo, Whakapapa, Ohakune and Turangi.

# **Objective**

 To prevent or minimise damage by fire to public conservation land and other state areas within the conservancy.

- (a) Absolute priority (with the exception of safety to human life) will be given to the control and suppression of fires on or threatening public conservation land.
- (b) The department will meet legislative requirements and follow departmental policy for rural fire suppression.
- (c) The department will liaise effectively with adjoining rural fire authorities and the national rural fire officer so as to provide an efficient rural fire-fighting force within the conservancy.

- (d) The conservancy's fire plan will be revised and distributed prior to October each year.
- (e) All staff will be trained, prior to the fire season each year, in use of fire equipment and fire-fighting techniques. Follow-up training will continue during the fire season.
- (f) Fire equipment within Ruapehu and Turangi/Taupo areas will be maintained in a high state of readiness throughout the year.
- (g) Operation of an efficient after-hours duty and call-out system will continue to ensure fires are promptly and effectively suppressed.
- (h) During the fire season daily fire weather index (FWI) readings will be maintained and used in effective public education concerning the current fire risk and fire prevention.
- (i) The department will control the issue of fire permits for all fires on or within one kilometre of public conservation land.
- (j) Illegally lit fires will be investigated and prosecutions commenced, when appropriate, under the Forest and Rural Fires Act 1977.

# 3.1.4 Animal Pests

The department's responsibilities in regard to the control of animal pests are derived primarily from the:

- Conservation Act 1987, which sets out that land and all other natural and historic resources are to be managed for conservation purposes;
- National Parks Act 1980, which sets out that introduced animals shall, as far as possible, be exterminated;
- Reserves Act 1977, which sets out that the department ensures, as far as possible, the survival of all indigenous flora and fauna in their natural communities and habitats;
- Wild Animal Control Act 1977, which has the purpose of controlling wild animals generally and of eradicating wild animals locally where necessary and practicable, as dictated by proper land use.
- Biosecurity Act 1993, which is the umbrella legislation under which pest control is managed.

Red deer, feral cats, hares, possums, mustelids, rats and mice are widespread throughout the conservancy, while sika deer, feral horses, goats, feral pigs and straying domestic stock occur with a more localised or restricted distribution. The *Animal Pests* map shows distribution of animal pest species in the conservancy and the type of habitat and terrain that these animals cover.

Introduced mammals have dramatic influences on both natural habitats and native fauna. Browsing animals such as deer, goats, hares, horses, feral pigs, possums and domestic stock have modified almost every natural habitat in the conservancy through the selective browsing of favoured plant species. The changes in both habitat structure and composition are most obvious in forest communities where understoreys have lost their most palatable components and have become dominated by plants which are less palatable or better able to cope with browsing pressure. These communities are severely depleted in comparison with those from which the influence of introduced browsers has been removed - for example, exclosure plots.

Predators such as cats, rats, magpies, rooks, minors, mustelids, possums, pigs and dogs are partly responsible for the extinction of birds such as kokako and kakapo from the conservancy and are the primary reason for serious decline in species such as kiwi, kaka, kereru, much of our lizard fauna and land snails such as *Powelliphanta marchanti*.

Due to the extent of the animal pest problem, the department is unable to tackle all problems in all areas of the conservancy. Areas are ranked according to natural and historic values at risk where control is possible and practical, and efforts are directed at the highest ranked areas. Areas targeted for animal control work must reflect both national and conservancy priorities.

At the inception of the conservation management strategy the conservancy's priority is the control of goats at low or zero density wherever they occur.

The conservancy undertakes sustained control of possums. A conservancy possum control strategy identifies in more detail the conservancy's action, priorities and objectives.

Most wasp control operations will be limited to areas of high recreation value until their effects on natural resources have been more clearly defined and an effective method of large-scale control has been developed.

The conservancy's animal pest control work protects specific natural and historic values. Animal control for other reasons (animal health, Bovine tuberculosis, or local requirements) is the responsibility of either the animal health board or the Hawkes Bay, Waikato or Manawatu-Wanganui regional councils. The conservancy will continue to liaise and co-ordinate with the other animal control authorities so that all control work (particularly that for possums) is as integrated and effective as possible.

The use of recreational and commercial hunters is encouraged and integrated, as far as possible, into funded pest control work. The central North Island is a major destination for recreational hunters based in the western, southern and northern North Island. These hunters contribute to deer, pig and goat control within the conservancy, although their effectiveness in protecting natural resources in priority areas and more rugged or remote locations is limited and requires ongoing monitoring and review.

Commercial hunting operations are authorised under a concession system as a means of increasing deer control at times and in places where this does not conflict with other users. However, because many of the deer impacts are inflicted by sika deer, which are too small to have commercial value, commercial hunting has only limited value in many parts of the conservancy.

The conservancy does not undertake any official deer control operations over and above the current recreational and commercial hunting regime. As new information and technology come to hand, this remains an option at high priority sites where deer impact is manageable.

Commercial possum hunters are encouraged throughout the conservancy but their effectiveness is largely governed by fur prices and access.

The Kaimanawa wild horses are protected under the Wildlife Act 1953 within the area described in Fourth Schedule of the act. They are managed under a wild horse management strategy which details the action required to protect the special values of the Moawhango Ecological Region while still maintaining public enjoyment of a wild The management strategy is administered primarily by Wanganui Conservancy. The day-to-day management of the horses is carried out by Mangaweka field centre staff.

Cattle farming is a major land use within the region. Much of the public conservation land adjoins cattle farms. Effective fencing is essential in such areas to avoid major damage by stock. Although many of the public conservation land boundaries are fenced, large areas remain unfenced and the ongoing maintenance of the present fencing requires significant resourcing.

# **Objective**

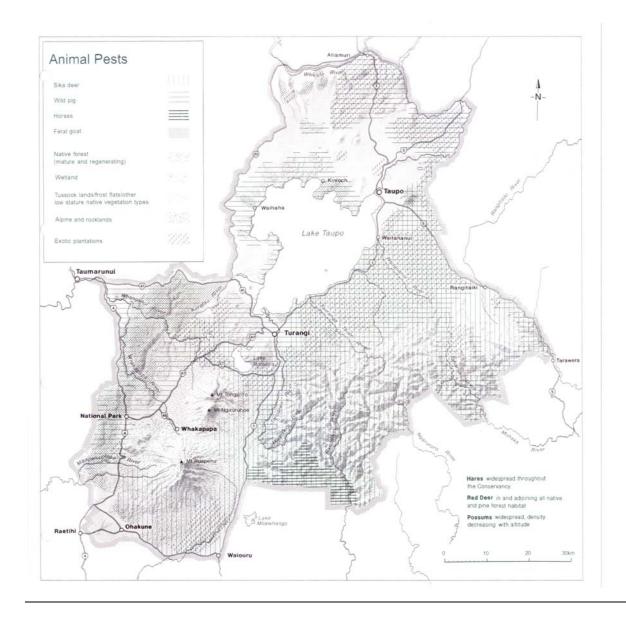
• To maintain indigenous biodiversity through appropriate management of animal pest species.

- (a) All animal pest control will be carried out in accordance with national and conservancy priorities, plans and guidelines.
- (b) The department will identify the key natural resources, indigenous ecosystems or species of high value which are at risk from animal pests within the conservancy.
- (c) Animal pests will be eradicated, where this is possible and practical, using all available techniques. Where eradication is not currently possible or practical, animal pests will be controlled at a level below the threshold at which damage occurs to natural and historic values.
- (d) Priorities for animal pest control will be established and reviewed regularly. Areas will be ranked using nationally developed ranking systems to ensure any control is targeted at the highest value conservation resources.
- (e) All animal pest control will be carried out in accordance with national and conservancy priorities, plans and guidelines, and with the department's Quality Conservation Management protocols and relevant standard operating procedures (SOPs).
- (f) Pest management approaches will remain consistent with the department's biodiversity management programmes.
- (g) The department will facilitate and encourage integration and co-ordination between all visitor groups, authorities and agencies with an interest in the eradication of animal pests and/or their impacts.
- (h) The department will undertake pest management to achieve maximum control across pest species where this is possible.
- (i) Animal control plans will be prepared and regularly reviewed for each animal pest or group of animal pest species present in the conservancy, in line with the broader strategic approach adopted for specific sites.
- (j) All goat control operations will be planned and reviewed annually to ensure that resources achieve and maintain target densities within each operational area in accordance with the conservancy's goat strategy, the national goat control plan and the site specific strategies.
- (k) Possum control within the conservancy will be undertaken in accordance with the conservancy's possum control strategy. Wherever possible control will be integrated with control operations carried out by other authorities. Operational plans will be reviewed annually to ensure that target densities/outcomes are achieved and maintained in accordance with the national possum control plan.

- (l) Commercial possum hunters will be encouraged to operate under a block system on all public conservation land within the conservancy consistent with the safety of other visitors and the protection of natural resources.
- (m) The department will encourage the involvement of recreational hunters in animal control. The department will maintain huts and tracks in appropriate areas, maintain and where necessary improve access routes, allow aerial access to designated areas and provide up-to-date information to hunters and hunting groups. The department will work closely with hunting groups to enhance the effectiveness of recreational hunting.
- (n) Concessions for the commercial recovery of deer will generally have open access to the major conservation areas within the conservancy except where restrictions are required in places during periods of high public use.
- (o) The department will carry out deer control in accord with national priorities and funding.
- (p) The Kaimanawa wild horses will be eradicated from public conservation land if located in this conservancy.
- (q) Rodent, mustelid and cat control will be carried out where possible and practicable in specific areas where they threaten indigenous biodiversity.
- (r) The department will continue to liaise and co-ordinate with local authorities, landowners, and commercial and recreational hunters to achieve effective concerted action against animal pest problems whenever possible.
- (s) Where public conservation land adjoins grazing land, effective control of stock will be sought through discussions with landowners and appropriate fencing. The department will develop a fencing strategy which includes an inventory to ensure all fencing is undertaken on a priority basis.
- (t) Public awareness of the need to control animal pests within the conservancy will be fostered.
- (u) Existing animal/vegetation monitoring programmes will be reviewed on a regular basis to ensure that trends in animal densities and impacts and the effects of control operations are known as far as possible. The most cost-effective, efficient and sustainable methods of monitoring will be adopted.
- (v) The department will keep up with and actively pursue new technology or information that leads to an increased capacity to eliminate animal pests.
- (w) The department will oppose the introduction of potential animal pests into areas where they are not currently present. This shall not apply to legally authorised liberations of animal pest species, including those for control purposes, such as Judas goats, or for scientific research purposes.

(x)	Where illegal or accidental introductions of new species occur all possible steps
	will be taken to remove them.

(y)	Future pest	species	will b	e identifie	d early a	ınd	classified	in t	erms	of their	threat
	to natural va	alues so	that c	ontrol or e	radicatio	on p	orogramm	es c	an be	implem	ented.





# 3.1.5 Plant Pests

The department's responsibilities in regard to the control of plant pests are derived primarily from the Biosecurity Act 1993, which is designed to achieve the exclusion, control or removal of any pest or disease which has the potential to be a serious problem in the New Zealand environment, and the Reserves Act 1977, National Parks Act 1980 and Conservation Act 1987, under which the department has an obligation to protect native flora and fauna from the effects of introduced plants on public conservation land.

A very large number of introduced plant species occur on public conservation land. Many of these pose little or no threat to ecological processes or management objectives. A limited number, in certain circumstances, threaten native communities or individual plant or animal species. These are considered plant pests. A plant becomes a problem when it modifies or threatens to modify the surrounding environment and ecological processes. The *Plant Pests* map shows the distribution of plant pests within the conservancy.

The three main reasons for undertaking plant pest control are:

- 1 to protect high value sites (site-led control);
- 2 to prevent a newly-arrived plant pest which is a perceived serious ecological threat from establishing in a particular area (plant pest-led control);
- 3 to be consistent with regional pest management strategy purposes.

#### 1 Site-led Control

When prioritising areas for plant pest control, the sites listed below rank highly:

- a reserve or area containing a nationally or locally threatened community, e.g., wetland, frostflat or geothermal area;
- a reserve or area containing a nationally or locally threatened species of plant or animal, e.g., mistletoe, kaka;
- a reserve or area containing the best or only example of a particular community or vegetation type within a particular ecological district, i.e., a highly representative area.
- an area of national or international importance, e.g., Tongariro National Park (World Heritage Site);
- an area of high natural and historic values which is easy to rid of plant pests and keep in its natural state;

- an area important as a buffer or seed source for a particular high priority reserve or area:
- an area set aside for scientific research;
- an area important for soil and water values;
- an area with high public use or visibility (visual and access values).

# 2 Plant pest-led Control

Some plant pest species which currently have limited distributions are such potential problems that they are considered to be worth controlling wherever they occur. This is particularly so if they are likely to totally change the character of the communities in which they occur.

The conservancy's single plant pest-led control programme at present is for climbing spindle berry (*Celastrus orbiculatus*). The aim is to eradicate this species from the conservancy.

# 3 Regional Pest Management Strategies

Regional councils manage particular plant pest species under three classifications: total control, border control and surveillance plant pests. These categories are based on species distribution, abundance, threat to the environment, and ease of control. By law the department is obliged to control some species listed in regional pest management strategies. Examples of these species, for Waikato Regional Council, are *Pinus contorta*, pampus and ragwort (Senecio jacobaea).

Plant pest surveillance - the process of actively searching for plant pests in places where they are likely to occur – is a priority. Plant pest surveillance work is targetted to areas of high natural values, specifically when plant pests are likely to be a threat to those natural values. Common sites include roading corridors, tracks, river valleys and areas where disturbance has occurred due to development. Specific attention is paid to areas which have few plant pests and may be maintained efficiently in that state.

## **Objective**

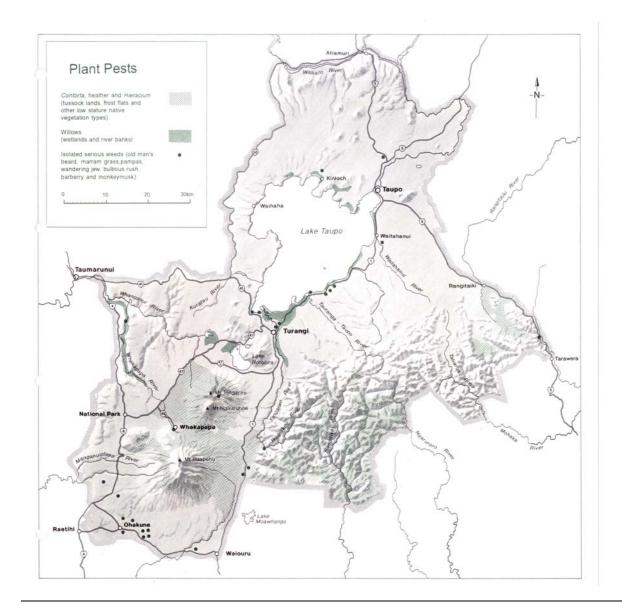
• To maintain indigenous biodiversity through appropriate management of plant pest species.

## Implementation

(a) All plant pest control will be carried out in accordance with national and conservancy priorities, plans and guidelines.

- (b) Priorities for plant pest control will be set on a 'value of the area' basis, a species basis or sometimes on a non-ecological basis.
- (c) The department will only focus control efforts on plant pests in priority areas where they are going to adversely affect the succession process, change the community of an area or endanger a nationally or locally threatened species.
- (d) A conservancy plant pest species list will be maintained so that the arrival of perceived new species is noted and appropriate action taken.
- (e) The department will carry out best practice for all plant pest control operations within recognised and accepted environmental guidelines.
- (f) A range of control methods will be considered for plant pest operations including chemical use, hand-pulling, cutting, ringbarking, mulching, mowing, revegetation (with the aim of smothering or shading out plant pests) and biological control.
- (g) Reasonable effort will be made to establish the heather beetle as a biological control agent.
- (h) Whenever chemicals are the only practical answer to a problem the department will use those which are least harmful to the environment. The use of chemicals will be assessed with associated environmental risks and any use will comply with restrictions and conditions present in legislation.
- (i) The department will continue to use volunteer input in pest eradication programmes.
- (j) The department will continue its intensive monitoring programme to identify plant pest problems and their scope.
- (k) The success of control efforts and resulting improvements in the ecological health of areas will be monitored as an integral part of plant pest management.
- (I) Purposeful liaison will be maintained with agencies and landowners responsible for plant pest control on unprotected land within the conservancy, particularly with regard to *Pinus contorta*, climbing spindle berry (*Celastrus orbiculatus*), old man's beard and pampas.
- (m) The department will work closely with neighbouring landowners and managers to focus on plant pest management where natural values are threatened on public conservation land.
- (n) The department will advocate through statutory processes to stop the spread of aquatic plant pests within this region. This will be undertaken with the regional councils who have the statutory function for aquatic weed pest management.

- (o) Public awareness of the need to control plant pests will be fostered.
- (p) Through its additional resourcing and statutory focus on aquatic pest management the department will take an active role in policy and operational matters to seek the management of aquatic pests to reduce their effect on indigenous aquatic ecosystems.





# 3.1.6 Restoration/Rehabilitation

This conservancy has a landscape of diversity. Natural processes, landform and land use patterns have contributed strongly, and continue to contribute, to its character. The conservancy includes areas scarred by nature and by human activities and although some of these wounds heal naturally, others need a helping hand and require active management.

Restoration means returning a place as nearly as possible to an earlier known state. The department integrates the principles and practices of restoration into all of its operations, assisting nature in the rehabilitation of ecosystems.

The department works in a proactive manner with developers and infrastructure management agencies to avoid adverse effects on natural resources which may lead to retrospective attempts to restore those values. The conservancy has a strong record in this regard and also takes the opportunity where presented to seek mitigation for disturbance to natural values by way of a conservation currency, which emphasises a project's known conservation outcomes over financial mitigation.

Restoration/rehabilitation work in the conservancy has traditionally been involved with large-scale development work such as the Waikato River Power Scheme, the Rangipo Power Scheme, state highway realignments, main trunk railway realignment and ski area road alignments. In these cases developers are required to fund restoration work which is often administered by the department to achieve the desired outcomes.

New priorities will include State Highway 1 realignments alongside Lake Taupo and the Desert Road. Large tracts of exotic forest (including *Pinus contorta*), mainly within Plateau Forests, will be restored to indigenous habitats.

Public conservation land provides ample opportunity for restoring a large number of biological communities and systems to achieve a representative range of natural environments. Private landowners also have an important role to play in protecting indigenous ecosystems. It is essential that restoration programmes are not confined to public conservation land and that the wider community is aware of the need to restore private land where natural values have been compromised.

# **Objective**

• To restore/rehabilitate disturbed areas to a self-perpetuating original condition where natural processes continue as free from human influence as possible.

- (a) Where possible, disturbance of the natural environment will be prevented so that restoration is not necessary.
- (b) Sites of high natural and historic value which have been degraded by events such as human-induced fire, inappropriate use, or animal and plant pests will be restored.

- (c) Priority areas for restoration/rehabilitation will be those with high natural and historic values at risk, or those where there are significant natural and historic values unrepresented elsewhere in the conservancy, and where restoration/rehabilitation is possible and practical.
- (d) Sites degraded by concessionaire activities will be restored where possible and practical at the expense of the concessionaire.
- (e) Community restoration/rehabilitation initiatives on privately owned land will be facilitated and encouraged.
- (f) Community involvement in projects on public conservation land will be facilitated.
- (g) The progress of all restoration/rehabilitation projects will be assessed, monitored and reviewed.
- (h) Where nursery stock is used for revegetation only eco-sourced stock will be used.
- (i) Restoration will be required as part of approved development projects for roads, rail, hydroelectricity and tourism and may take into consideration the technical and operational requirements of the developer.
- (j) In some cases other species, including exotics, may be used for particular short-term management purposes e.g., as nurse crops for other plants and food sources for native birds.

# 3.1.7 Research, Survey, Monitoring and Information Management

The department requires a sound information base to provide for effective management. Managers attempting to retain biological diversity, for example, need to understand which elements in the natural environment are most threatened, which organisms or factors are displacing these threatened elements, and how the ecosystems of which the threatened elements are a part function. Managers of recreation opportunities need to understand the expectations and needs of recreationists so that these can be balanced against the department's role in protecting natural and historic values.

Information gathering falls into three broad groups:

- research endeavours to discover new facts by critical application of scientific method;
- survey investigations to establish the threats to and spatial distribution of conservation resources;
- monitoring investigations to establish changes and trends in resources over time.

Research, survey and monitoring carried out by or for the department focus on natural and historic resources and recreation priorities and the need for and effectiveness of management of these resources. Current knowledge is also fundamental to the department's statutory advocacy and public awareness activities.

# 1 Research

National priority conservation research is funded by the Science and Research Division and carried out by scientists via internal or external research contracts. Research needs for proposals are submitted annually for development and evaluated by the conservancy advisory scientist and specialist advisory groups before being considered by the department's science board for funding. Due to the competitive nature of the annual science funding round some conservancy priority research bids are unsuccessful. Some of these are funded or supported by the conservancy and carried out by conservancy staff or other researchers, particularly graduate students. In addition to conservancy priority research there is a steady stream of research by external scientists and university staff or students on areas managed by the department.

# 2 Survey and Monitoring

Knowledge of the full range and current status of natural and historic resources on public conservation land is inadequate. In many cases management has to proceed with only an interpretation of available information rather than on the basis of comprehensive knowledge of the resource. Surveys help to fill the gaps.

Change takes place everywhere, both in natural ecosystems and in human use of these ecosystems. Monitoring is necessary to assess the rate of change and its direction.

Most survey and monitoring is co-ordinated and conducted by conservancy staff, often with the assistance of volunteers and interest groups.

#### 3 **Information**

The information requirements for management are immense. Traditionally most information has been stored as hard copy in publications, files, maps and photographs. Increasing use of computer-based databases is being made at both national and conservancy level, allowing more efficient sorting and retrieval of information. The department is elsewhere currently trialling options for geographic information systems that will allow greater integration of spatial information and is improving its storage and retrieval system for existing databases.

The department has copies of national databases including wetlands of ecological and representative importance (WERI), sites of scientific and wildlife importance (SSWI), freshwater fish, reptiles, threatened species, national indigenous vegetation survey (NIVS) and the geopreservation inventory. The department also has access to the database of archaeological sites and the national land register.

In addition the conservancy maintains its own land information inventory and is developing specific databases.

# **Objective**

• To undertake research, survey and monitoring in order to enhance management of indigenous biodiversity and visitor experiences on public conservation land.

#### Resource Allocation Criteria

Research will be directed to where rapid change is threatening vulnerable ecosystems and/or rare plants and animals and where conservation managers need better data and information.

Where there is inadequate information at present, surveys of natural and historic resources within the conservancy will be carried out.

Changes in the status and condition of the most vulnerable ecosystems and most threatened plants and animals in the conservancy will be monitored.

- (a) Appropriate monitoring programmes will be designed and carried out as part of all pest control programmes to determine success and to guide future management action.
- (b) Research and monitoring involving recreation, including the Taupo trout fishery, will continue to be important.
- (c) Collections of published and unpublished material including reports, aerial photographs, slides, maps, digital images and videos will be developed at the Turangi office and effective links will be maintained with departmental libraries for access to relevant national and international literature.
- (d) Databases of natural resources will be maintained and links to natural databases will continue to be developed.
- (e) The department will co-operate with other agencies in research of benefit to conservation.
- (f) The public will be encouraged to report sightings of any rare or threatened species.
- (g) Priorities for research, survey and monitoring will be established and regularly reviewed.
- (h) Research and monitoring results will be effectively communicated and incorporated into management decisions.

# 3.1.8 Natural Hazards

The Resource Management Act 1991 defines a natural hazard as any atmospheric earth- or water-related occurrence producing an action which may adversely affect human life, property or other aspects of the environment. The natural hazards within this conservancy include volcanic events, avalanche, erosion, landslides, earthquakes and flooding.

Although the responsibility for managing natural hazards within the region lies primarily with district and regional councils the department has a two-fold responsibility. The first is protecting the public while on public conservation land. The second is protecting natural processes by removing or minimising threats. The threats are essentially inappropriate human interaction or infrastructure.

Healthy functioning systems have, by their very nature, dynamic processes which can be destructive in human terms, both on natural environments or human infrastructure. There is a growing view that our management of natural places should focus on allowing natural processes to occur while managing the hazards that may be inherent in them. This means a strong emphasis on managing visitor use. The iwi of this conservancy, along with a large number of groups with an historic association with the mountains, have consistently expressed the view that interference in functioning natural processes should be the last recourse from a conservation management perspective. It is acknowledged that there are a number of agents with different, and at times contrary, management agendas.

The major and obvious natural hazard within the conservancy is volcanic activity. This may be in two major forms:

- (a) hazards from 'ground hugging' flows that principally comprise lava flows, pyroclastic flows and lateral blasts, landslides, lahars (volcanic mud and debris flows) and associated floods;
- (b) hazards associated with the transport of materials through the air in eruption columns mainly particles of ash, stones and pumice which are collectively called tephra, and the danger from volcanic gases which may be toxic.

The most frequent hazard - that of lahars - is planned for through physical warning systems which monitor the Crater Lake of Mount Ruapehu and give warning of the volcanic events. A lahar flow map set is under current revision. This designates lahar return periods and potential threats.

The ski area managers on Mount Ruapehu are required to provide for public safety in their ski area operational plans which are approved by the department.

Avalanches are another serious threat to human life particularly in Tongariro National Park. Managers of all three ski areas must maintain current avalanche management plans and there is close co-operation between the ski area managers and the department in providing information to backcountry visitors.

The ability of the department to advocate for effective hazard management on private land is limited. Input to district and regional plans and involvement in Resource Management Act processes give opportunities to advocate for the protection of natural resources through avoiding or remedying the effects of natural hazards.

# **Objectives**

- To ensure natural processes can continue to function on public conservation land.
- To minimise the damage to infrastructure, and to minimise public risks, by siting and re-locating, where appropriate, infrastructure away from hazard zones.

- (a) All land of high natural and historic value will be identified and the department will seek to provide for the continuation of natural processes.
- (b) Assessments of hazards to (i) human life and property and (ii) the natural and historic values of public conservation land will be undertaken on an ongoing basis.
- (c) Measures will be promoted, in regional and district plans, which provide for natural processes on public conservation land to continue functioning.
- (d) Agreements will be developed for all ski area concessionaires on Mount Ruapehu to have up-to-date safety management plans for volcanic and avalanche hazards.
- (e) The eruption detection system will be regularly reviewed to make sure that its primary objective of ensuring public safety is met. The necessity to upgrade the system to a higher standard will be considered by the department. The costs of any evaluation and upgrade will be contributed to by the concessionaires who benefit from the system.
- (f) Infrastructure at risk from natural hazards will be removed where possible and new infrastructure will not be located where at risk from natural hazards.

# 3.1.9 Classification and Control of Public Conservation Land

The Reserves and Conservation acts and the Wildlife Act 1953 contain provisions for the classification of land. The purpose of protected areas classification is to ensure adequate control and management and appropriate levels of development and preservation for different areas managed by the department. Protected area status can be significant in determining how an area is perceived by the public and the level of use it receives (see *Public Conservation Land* map).

The department's statutory responsibilities under the Reserves Act 1977 and the Conservation Act 1987 include acquisition of land, exchanges of land, classifying of reserves, disposal of land and setting apart of land for conservation and reserve purposes. The department is also required by legislation to process certain applications on behalf of clients such as local authorities. This is undertaken on a cost recovery basis and is client driven.

#### **Objective**

 To continue to review land status, classification and management methods to provide for the most appropriate management of natural and historic values on public conservation land.

- (a) The existing classifications of reserve areas and specially protected conservation areas will be reviewed to ensure that the status of these areas is appropriate and logical for management purposes.
- (b) Public conservation land which adjoins national parks, forest/conservation parks or reserves will be assessed as possible additions to those parks or reserves.
- (c) Land additions to Tongariro National Park and Tongariro Forest will be completed as soon as is practicable.
- (d) In considering any area for disposal the alternatives and merits of retention and revegetation and retention for possible land exchange (for privately owned areas which are worthy of protection) will be investigated.
- (e) Consideration will be given to the protection of any residual natural and historic values by way of covenants prior to any disposal.
- (f) Where control and management responsibilities for reserves can be assumed by another administering body, in terms of the Reserves Act 1977, and where divesting these responsibilities would not compromise natural, historic or recreation values, such divestment will be considered.

# 3.2 Protected Species

# 3.2.1 Introduction

Under the Conservation Act 1987, the National Parks Act 1980 and the Reserves Act 1977, the department is responsible for native fauna and native fauna habitats on land managed by the department. Under the Wildlife Act 1953 it is also responsible for the protection of native fauna on all land. The department may advocate protection of native fauna habitats on private land.

Native New Zealand plants are only protected, legislatively, where they occur within areas protected by the Reserves Act 1977, the National Parks Act 1980, the Conservation Act 1987, the Queen Elizabeth II National Trust Act 1977, the Wildlife Act 1953 and conservation covenants. The Native Plants Protection Act 1934 gives some protection but this is very limited on private land. Outside of these acts, plants have little protection. The department has an advocacy responsibility for their protection.

# **Priorities for Management Protection**

The department's effectiveness in protected species work is dependent to a large extent on its ability to prioritise. National guidelines have been prepared by the department which rank flora/fauna species according to their priority for management. Priorities are determined by taxonomic distinctiveness, status of the species, threats facing the species, vulnerability of the species and human values. A total of seven bird species, two fish, one reptile, two mammals, two invertebrates and seventeen plants are identified in A, B or C categories for threatened species conservation in the conservancy (appendices 3 and 4). Conservancy priorities for protected species work take into account national priorities, species recovery plans and local assessments of conservation needs.

Where feasible and practical, the ecosystem restoration (mainland island or site management) concept will be developed for protection of specific species and ecosystems in the conservancy. Mainland ecosystem restoration projects involve areas where systematic management of target animal and plant pests is carried out on an integrated and sustained basis to allow indigenous ecosystems and species to recover. In this conservancy development of such a project is currently under way in the Rangataua Forest in an area known as the Karioi Rahui. The project is managed as a co-operative venture between the department and tangata whenua Ngati Rangi. Mainland island projects tend to be at high profile representative sites.

High intervention (close order) management techniques may be required for some critically threatened species to ensure their survival in the short term. Methods of close order management are specified in species recovery plans.

The Taumarunui and Moawhango ecological districts protected natural area plans (PNAPs) have been completed. The Atiamuri plan is due for completion in 2003. Plans for the Taupo, Tongariro and Kaimanawa areas have not been initiated. This work will be undertaken in line with national priorities. These sites, however, are relatively well understood, with the essential ecological values protected.

# 3.2.2 Native Fauna

Habitat protection is essential for the long-term survival of a plant or animal species. A species cannot sustain itself if all its needs are not met in the environment that it occupies. Each species has its own habitat requirements. The *Habitat* map displays broad habitat types within the conservancy.

The department aims, where possible, to retain intact natural environments (ecosystems) that serve the needs of many species. The majority of these species are capable of sustaining themselves providing their ecosystem is in good health. This is the ecosystems approach to protecting species.

Some species – those which have specialised requirements that are not being met under current circumstances – cannot be protected under the ecosystems approach. Their survival requires special management techniques which may include island transfers, captive rearing, habitat restoration/improvement and predator control. This is the single species approach to management.

The list of species in appendix 3 is by no means exhaustive and the department must recognise that further species of varying threatened status are likely to surface in the future. The department must be flexible enough to reappraise its priorities as new information comes to light. It must also recognise the role the public and local iwi play in threatened species conservation. Opportunities for the public to participate are an important educational tool in this field. Consultation with iwi will ensure that local Maori are aware of issues which may assist the survival of species. This is especially important on issues relating to cultural materials which are derived from threatened species sources.

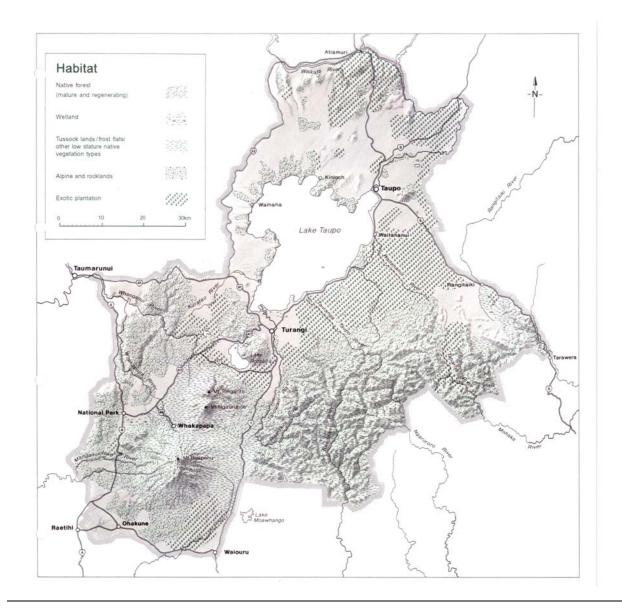
# **Objective**

• To maintain and enhance indigenous biodiversity through appropriate management of native fauna and native fauna habitats.

- (a) Protection will be provided for all native fauna in accordance with the relevant acts and regulations.
- (b) Completion of protected natural area programme (PNAP) assessments for the conservancy will remain a priority.
- (c) Management priorities for protected species and their habitats will be based on national priorities, requirements of species recovery plans and local assessments of conservation needs.
- (d) Collection of data on the distribution and population status of animal species for which there is insufficient knowledge will be an ongoing priority.

- (e) All threatened species management programmes will be developed in consultation with iwi.
- (f) A mainland ecosystem restoration area will be developed within the Karioi Rahui.
- (g) The Tongariro Forest Kiwi Project will be managed as a species conservation showcase project to encourage participation and awareness in the general public.
- (h) The public and specific interest groups will be encouraged to become involved in data collection, survey, monitoring and ongoing threatened species management activity.
- (i) The conservancy will liaise closely with the Eastern, Hawkes Bay, Taranaki and Auckland/Waikato fish and game councils over gamebird issues, as required by the Conservation Act 1987.
- (j) Where possible, the department will provide the means to reintroduce species that have been lost from the area, such as kokako and pateke.
- (k) The department will seek appropriate mitigation and restoration in respect of whio on rivers affected by the Tongariro Power Development scheme.
- (l) The department will seek appropriate protection of the habitat of indigenous water fowl through its advocacy.
- (m) The department will initiate research into fauna/visitor conflict in relation to site disturbance as these issues come to the department's attention.







# 3.2.3 Native Flora

Habitat protection is essential for the long-term survival of a plant or animal species. A species cannot sustain itself if all its needs are not met in the environment that it occupies. Each species has its own habitat requirements. The *Habitat* map displays broad habitat types within the conservancy.

The department aims, where possible, to retain natural environments (ecosystems) that serve the needs of many species. Management of threatened plants focusses on protection of habitat in the wild. Measures may include protection of individual plants, enhancement of wild populations with plantings of propagated material or manipulation of habitat to encourage natural regeneration. Cultivation in nurseries and gardens is a last resort.

Identification of threatened species is the first obvious step in their protection. A number of plants in the conservancy are listed as threatened nationally. Several others are under severe threat regionally. Some nationally common species are significant within the conservancy because of their distinct distributions here.

#### **Objectives**

To protect indigenous biodiversity in the conservancy through appropriate management of native flora and native flora habitats.

#### **Implementation**

(a) Priorities for threatened plant protection will be determined by the degree of threat, the urgency of the situation and the importance placed on each species in both the national and local context. Priorities will be reviewed annually.

- (b) Completion of protected natural area programme (PNAP) assessments for the conservancy will remain a priority.
- (c) A strategy will be drawn up to focus management efforts for threatened plants.
- (d) Links will be maintained with other conservancies, head office and botanical agencies to ensure that threatened plant information relevant to the conservancy is regularly updated.
- (e) Monitoring of known threatened plant populations will be carried out regularly to assess their condition.
- (f) Where threatened plants exist on public conservation land every effort will be made to eliminate the threats to their survival. Efforts may include enhanced wild animal and plant pest control, population enhancement, regulation of public use and publicity to increase awareness.
- (g) Management will be focused on protection and enhancement in the wild in the first instance, involving removal or minimisation of threats, planting to increase populations and legal protection if required. Where necessary, extra measures such as environmental manipulation or removal of seed plants from the wild may be considered to ensure their survival.
- (h) Cultivation of threatened plants away from their wild sites will occur only as a back-up to very vulnerable populations or where wild populations cannot be saved.
- (i) The department will develop the means to reintroduce species which have been lost from this region.
- (j) The department will advocate the protection of threatened native plants and their habitats off public conservation land.
- (k) In consultation with landowners, the department will explore ways of both physically and legally protecting threatened plants which occur on private land.
- (l) The department will work closely with tangata whenua on threatened plant protection programmes especially where culturally valued plants are involved.
- (m) Staff and volunteers will be trained so that they become more aware of plants at risk.
- (n) Botanists and botanical enthusiasts will be directed towards areas that are either little known botanically or where it is suspected that threatened plants could exist.
- (o) Information on threatened plants will be made available, where appropriate, to the public. The department will encourage the public to report any sightings of threatened plants.
- (p) The value in the propagation of rare and endangered species of plants will be advocated through education and community liaison.

# 3.2.4 Taking of Plants and Animals

The Conservation Act 1987 gives some discretion to allow the taking of plants and animals from public conservation land, subject to guidance from this strategy.

Section 4 of the Conservation Act 1987 requires the department to give effect to the principles of the Treaty of Waitangi and specifically refers in section 30 to the allocation of plant materials to tangata whenua for traditional use purposes. The Reserves and National Parks acts also include specific provisions relating to the taking of plants.

#### **Objectives**

- To permit the taking of plants and animals where this provides for increased understanding of biodiversity or where there is a direct conservation benefit.
- To permit the taking of plants and animals for traditional Maori use.

- (a) Taking of plants and animals which are threatened or locally uncommon will be permitted only where considered essential for management.
- (b) Requests for taking of live native animals protected under the Wildlife Act 1953 will be permitted only where considered essential for management.
- (c) Appropriate requests for taking of dead native animals or parts thereof protected under the Wildlife Act 1953, for scientific, educational, management or traditional Maori use will be granted permits where appropriate.
- (d) Appropriate requests for taking of native plant material for scientific, educational, management, or traditional Maori use will be granted permits where appropriate.
- (e) Taking of plants or dead animals or parts thereof for scientific or educational purposes will be limited to species which are in abundance and only minimal quantities will be approved.
- (f) Applications for traditional Maori uses will be referred to the appropriate iwi liaison authority which will then make a recommendation to the conservator. The department will actively encourage and support appropriate iwi to make recommendations for traditional Maori use.
- (g) Plants or animals may not be taken from ecological areas or nature reserves except where necessary for management.

- (h) All applications for scientific purposes will be assessed by the department advisory scientist.
- (i) All applications for collection from land managed by the department will be assessed by staff for resource availability and abundance.
- (j) All decisions on applications will be made by the conservator, taking into account the advice of staff and/or the cultural materials committee as appropriate.

#### **Earth Resources** 3.3

#### 3.3.1 Introduction

Preservation of New Zealand's unique geological features, landforms, soil sites and active physical processes is essential to the continued pursuit of earth science education and research. These features and processes should be managed for public presentation and education where this is compatible with their long-term preservation.

#### **Objective**

To ensure the survival of representative examples and provide for the intrinsic value of the broad diversity of New Zealand's geological features, landforms, soil sites and active physical processes.

- The department will advocate the protection of the best representative examples (a) of the conservancy's landforms, geological features and soil sites, in line with their perceived priority for action based on current and future threats to their survival.
- (b) The department will maintain a conservancy inventory of important earth resource features and sites and will advocate its use by all land management bodies. Research to refine and add to this inventory will be carried out.
- A working relationship will be developed and maintained with local authorities, (c) universities and Crown research institutes to ensure that earth resource values are inventoried and fully considered in all statutory processes.
- Protection mechanisms such as covenants will be used to achieve protection of (d) sites of regional and national significance on private land.
- The department will raise public awareness of earth resources heritage and (e) encourage understanding of and support for earth resources conservation.

# 3.3.2 Cave Management

Tongariro/Taupo Conservancy does not have an extensive cave network. The Okupata Caves are the only known cave system. Thousands of people visit this system each year, either with concessionaires or unguided.

The Okupata Caves are regionally significant because they are isolated in an uncommon limestone formation. Flooding and visitor use impact on their flora and fauna and on their limestone formations.

Over recent years the department has upgraded access to the caves, which are now being managed in line with national departmental policy. The focus of this policy is to protect the natural system and to develop visitor understanding, rather than simply to provide for physical interaction.

#### **Objectives**

- To protect known cave systems in their natural state and provide for public use where this does not adversely affect natural values.
- To enhance visitor appreciation of cave systems.

- (a) The department will develop its understanding of the Okupata Cave system so that it may better manage the system's natural values.
- (b) Expert advice will be sought for the ongoing management of the system.
- (c) Information, including an on-site interpretive system, will be made available to the general public and concessionaires to enhance visitor experience, ensure visitor safety and provide for the protection of the system.
- (d) The following guidelines will be implemented through concessions or by-laws in order to protect the cave system, unless an applicant can demonstrate with expert advice that they are unwarranted:
  - a minimum guide-client ratio of 1:10 will be required;
  - total numbers of visitors within the caves at any one time must not exceed 30;
  - guides must be appropriately qualified to provide for visitor safety and interpretation of the experience for the clients. Input will be sought from the New Zealand Caving Association in this respect;
  - the department will monitor concessionaire activity at the concessionaire's cost.
- (e) The department will work with schools to ensure the above criteria apply in respect of their activities.

# 3.4 Freshwater Fishery Management

The department manages all freshwater fish, including sports fish, within the Taupo Fishing District which covers a large part of the conservancy.

The Conservation Act 1987 provides for the preparation of statutory plans to guide freshwater fishery management. There are two types of plans:

- freshwater fishery management plans;
- sports fish management plans that must be prepared by the managers of sports fisheries.

These management plans must not derogate from the objectives and priorities set out in this conservation management strategy.

#### 3.4.1 Freshwater Fishery

The conservancy is not well endowed with indigenous freshwater fish species. It supports low numbers of fish and low species diversity when compared with other parts of the country. The Wanganui catchment, however, does have notable populations: eleven species have been recorded in the Manganuioteao, for example.

Many native fish require access to the sea to complete their life cycles. In areas where there is access from the sea, galaxiids such as koaro and bullies can be found.

Smelt are native to New Zealand but are not indigenous to this conservancy. They occur in large numbers in Lake Taupo, having been introduced as a trout food species in the 1930s. There is iwi interest in harvesting smelt for human consumption.

Exotic freshwater fish (other than sports fish) include goldfish, sailfin mollies and brown bullhead catfish. All of these occur in Lake Taupo.

#### **Objectives**

- To protect and, where possible, enhance native fish populations and their habitats.
- To prevent undesirable introductions of new species to the conservancy.

- (a) The department will continue to build on knowledge of species present and their distribution.
- (b) Exotic fish will not be introduced into waters where they do not already exist.

- (c) Field surveys and inventories will be undertaken to obtain information on fish and other freshwater habitats.
- (d) The department will advocate for the protection of indigenous fish populations and their habitats.
- (e) The impacts of potentially harmful species, e.g., catfish, will be monitored and control undertaken or facilitated where it is deemed to be a priority and where this will result in conservation benefits.
- (f) Exotic fish will be controlled or removed where they are a threat to indigenous aquatic ecosystems and methods are available to achieve this.
- (g) The Fish and Game Council's efforts to preserve and enhance wetland and riparian habitats will be supported by the department.
- (h) The department will be alert to the potential for the introduction of new species (e.g., koi carp) which may be detrimental to aquatic values generally.

#### 3.4.2 Sports Fishery

The sports fishery within the Tongariro/Taupo Conservancy (in particular Lake Taupo and its surrounds) is of international acclaim. The Taupo fishery has the highest level of angling use of any sports fishery in the country, currently providing for around forty percent of New Zealand's total freshwater sports fishing. The 1926 Maori Land Amendment and Maori Land Claims Adjustment Act established a relationship between the Crown and iwi to manage the Lake Taupo Sports Fishery. The Crown, initially through Internal Affairs, Wildlife Service and then the Department of Conservation, has exercised its part in this relationship through management of a wild trout fishery. The benefits to the general public come through the fishery itself, and in the access opportunities that the 1926 Act provides for on the margins of Lake Taupo and its tributaries. The department and iwi meet regularly to discuss fishery management issues. The Minister of Conservation has established the Taupo Fishery Advisory Committee (comprising representatives of the key visitor and interest groups) to advise the Minister and the department on sports fishery policy and management actions.

The Conservation Law Reform Act 1990 established fish and game councils to replace the old acclimatisation and conservancy council structure. Outside the Taupo Fishing District, in all other parts of New Zealand, sports fish are managed by these regional councils. The Taupo Fishing District falls within

is managed by the department. The Director-General of Conservation has the power, here, of a fish and game

the Eastern Fish and Game region but

council.

The main functions of fish and game councils are to:

"...manage, maintain, and enhance the sports fish and game resource in the recreational interests of anglers and hunters..."

### and in particular to:

- assess and monitor sports fish and game populations, recreation use and the condition of habitats;
- maintain and improve the sports fish and game resource;
- promote sports fish and game recreation and educate anglers and hunters on ethics and other matters;
- assess costs, develop appropriate licence fees, and issue hunting and fishing licences;
- advocate the interests of anglers and hunters in the statutory planning process, formulate annual operational work plans, prepare draft fish and game management plans, identify research requirements, implement national policy, and liaise with local conservation boards.

The Act provides for the Director-General of Conservation or a nominee of the Director-General to attend and speak at all meetings of fish and game councils. That person does not have voting rights. Meetings of the Eastern Fish and Game Council are attended by a conservancy staff member.

As the agent responsible for the sports fishery, the department has an approved sports fish management plan in place.

#### **Objective**

- To protect the natural sustainability of trout populations in the Taupo Fishing District.
- To facilitate a range of angling opportunities to provide a world class fishery for anglers in the Taupo Fishing District.
- To maintain links with the fish and game councils and support, where possible, their efforts to enhance the conservancy's sports fish and game resources, provided natural resources are not in any way compromised.

#### **Implementation**

(a) The department's ten-year plan, prepared in consultation with the Taupo Fishery Advisory Committee, Ngati Tuwharetoa and the wider angling community, will guide fishery management actions.

- (b) The department will prepare annual budgets and operational work plans which reflect the biological needs of the fishery and the aspirations of its users, consistent with guidelines in the management plan.
- (c) The department will carry out the projects specified in annual work plans and publicly report on progress made.
- (d) A departmental representative will regularly attend the Eastern Fish and Game Council's meetings to maintain co-operative liaison.
- (e) Provided there is no risk to natural values and provided they are in accordance with this conservation management strategy and any operative management plans for specific areas, the Council's efforts to maintain or increase recreational fishing and wild fowling opportunities within the conservancy will be supported.
- (f) The department will ensure that any relevant fish and game management plan does not conflict with this conservation management strategy or any management plans for specific areas.
- (g) The department will ensure that its management policies will provide that any access will not unreasonably compromise wilderness sports fishery values.

# 3.5 Recreation Management

#### 3.5.1 Introduction

The department has responsibilities under various enactments to provide for and manage recreation on public conservation land.

- Under the Conservation Act 1987, the department is given the responsibility of fostering the use of natural and historic resources for recreation and allowing their use for tourism, provided this is consistent with their conservation.
- The National Parks Act 1980 gives the department responsibility to provide for visitor use and enjoyment of national parks.
- The Reserves Act 1977 also gives the department responsibilities for providing for recreation. Different types of reserves have differing levels of recreational emphasis, with more emphasis on recreation in recreation reserves.
- The New Zealand Walkways Act 1990 states that the department has a role in the establishment and management of walkways and in the provision of associated facilities.

Recreation management is an important activity of the department. For many people recreational use of land managed by the department provides their main link with natural areas. This can raise their awareness of natural and historic values and issues and can engender support for conservation. This link is nurtured by providing appropriate recreation opportunities and facilities.

Tourism, as a distinct element of recreation, is allowed rather than fostered.

The conservancy has relatively small areas of land to administer. The high level of visitor use is placing pressure on natural resources and visitor experience at many sites within the conservancy. The Recreation Tourism Use map illustrates the patterns of current recreation and tourism use.

Skiing is the predominant use of the mountains of Tongariro National Park. This park is also the focus of other alpine activities for the North Island. Tramping, short walks, hunting and angling are the highest uses of the backcountry. Hunting is most popular in the Kaimanawa Ranges and tramping use is greatest in the northern part of Tongariro National Park (on the Tongariro Northern Circuit/Tongariro Crossing).

Around the lakeshore and in lowland areas short walks, picnicking, sightseeing, fishing and swimming are predominant. Mountain biking is proving to be increasingly popular, particularly on the network of old logging roads in Tongariro Forest.

#### 1 Visitors

The conservancy has a relatively small resident population. It does, however, receive a particularly high number of visitors as the North Island's prime outdoor recreation area, its reputation based on skiing and other alpine opportunities, the Taupo trout fishery, the Kaimanawa sika deer herd and the short walks and tramping in Tongariro National Park.

The conservancy is readily accessible from the state highway network. There is a high quality tourism infrastructure within urban centres which has the potential to develop to a much higher level. This infrastructure, combined with easy access to public conservation land, means there is no need for additional visitor accommodation to be provided.

Visitors to the region are predominantly domestic, from the Auckland and Wellington metropolitan areas, but all other parts of the North Island are represented. Growth in visitor numbers is expected to be steady, with an 8% per annum increase in international visitors to the area. Domestic tourism growth is not expected to increase markedly except in particular activities such as mountain biking.

The conservancy has a number of facilities or areas which rank high nationally in terms of visitor numbers. These include Huka Falls (about 900,000), the Major Jones Bridge area of Taupahi Scenic Reserve (about 50,000), Rotopounamu Walk (35,000), the complete Tongariro Crossing (80,000) and Mangatepopo Valley (100,000).

The Bruce Road/Whakapapa Ski Area had almost 400,000 visitors in 1999, Ohakune Mountain Road/Turoa Ski Area about 240,000.

The Whakapapa Visitor Centre in 1999 had some 192,000 visitors and the National Trout Centre about 50,000. Bed nights totaled 11,000 on the Tongariro Northern Circuit Great Walk and approximately 3,000 on the Roundthe-Mountain Track in Tongariro National Park. The huts in the Kaimanawa Ranges showed about 2,500 bed nights.

#### 2 Recreation Planning

Recreation planning must take into account the likelihood of increasing demand so that visitor needs can be met without compromising natural and historic values. This should be done in liaison with other recreation providers so that the range of recreation opportunities and services can be considered in their totality.

There has been a traditional focus on backcountry areas in Tongariro National Park and Kaimanawa Forest Park. There is now increasing demand for opportunities and facilities on the fringes of the larger park areas and in areas close to population centres.

Areas around Lake Taupo are high use areas and careful planning is necessary, in conjunction with the relevant local authorities, to provide for this use and to

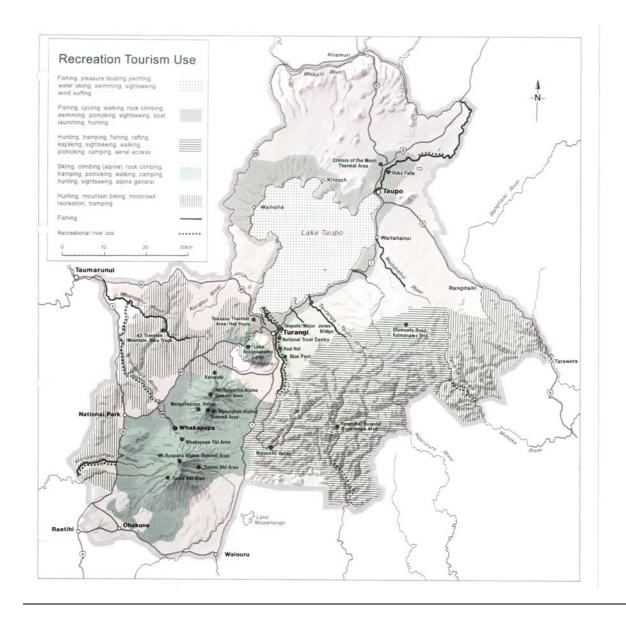
ensure that it does not damage significant natural and historic resources. Additional facilities for day visitors, such as toilets and short walks, are justified but concessionaire overnight accommodation or additional tramping huts are not appropriate. The provision of low-key camping facilities on the fringes of Kaimanawa Forest Park, in Tongariro Forest, and on any walkway established around Lake Taupo will be assessed, as will the need for improving hut and designated camping area facilities on the Tongariro Northern Circuit in order to better manage environmental and social impact problems.

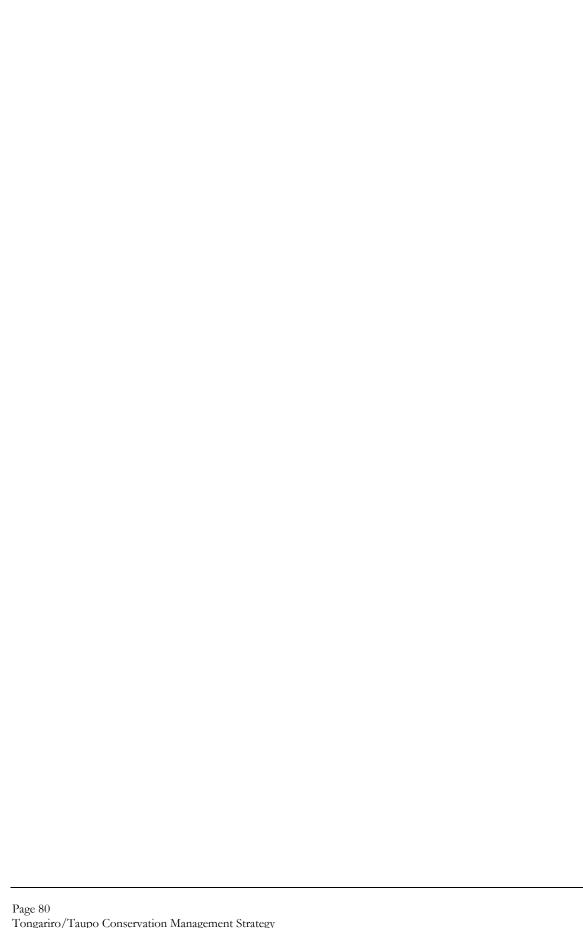
#### **Objective**

• To provide for a diversity of recreation uses on public conservation land if these are consistent with protection of natural and historic values or consistent with the purpose for which the particular reserve is held.

- (a) The department will continue to record visitor numbers and assess visitor needs as resources allow. Priority will be given to high use areas or areas where visitor use could potentially impact on high natural and historic values and the present information is inadequate.
- (b) Monitoring of visitor impacts on the environment will remain a key management function with adverse effects to be avoided, remedied or mitigated.
- (c) Visitor groups will be involved by the department in the development of recreation policy.
- (d) Other agencies involved in providing recreation opportunities which complement those available on public conservation land will be encouraged.
- (e) The department will advocate and negotiate for free access with private landowners.







#### 3.5.2 Recreation Use

#### 1 Visitor Access

The freedom of entry and access to and across public conservation land is regarded as a fundamental right by many New Zealanders.

Public access to land and resources managed by the department is normally encouraged, unless restrictions are necessary to protect natural or historic values, or for safety reasons.

Walking access to most areas is generally unrestricted except by physical ability, although in some classes of reserves, such as nature reserves, sanctuaries and scientific reserves, access may be limited to protect the values for which they are held. Other areas may need to be temporarily closed, or public use restricted, for conservation purposes (e.g., habitat rehabilitation of a heavily used camping area, protection of a threatened plant or animal, or revegetation of an eroding site). In such cases all reasonable steps are taken by the department to make the public aware of any closure and the reasons for it.

Adequate road and foot access to the boundaries of public conservation land is important to facilitate use and enjoyment by the public. Access to conservation areas is satisfactory over much of the conservancy but improvements are necessary in some areas.

The Maori Land Amendment and Maori Land Claims Adjustment Act 1926 provides public access around the shore of Lake Taupo. The act also provides special access for anglers with valid fishing licences to most of the fishing rivers and lakes in the area.

In most cases it is inappropriate for the department to compulsorily acquire further land for access under the Public Works Act 1981. However the department has an important access corridor in the Poronui Valley over which continued public access must be maintained.

#### **Objectives**

- To encourage and provide for foot access on public conservation land.
- To encourage provision of safe and unrestricted foot access to the countryside consistent with section 3 of the Walkways Act 1990.
- To provide, where practicable, access to public conservation land for people with disabilities, and to provide appropriate facilities.
- To provide free public access to public conservation land.

- (a) The adequacy of public access to conservation land will be monitored as part of the recreation planning programme.
- (b) Activities and access will be restricted only where this is necessary to protect natural and historic values, or for public safety.
- (c) Public access will not be restricted in favour of concessionaire activities, except where an existing lease provides an exclusive occupation.
- (d) The department will maintain and, where necessary, enhance walking and vehicle access to public conservation land and to other areas by way of easements, walkways, rights-of-way and other legally enforceable agreements, and also by liaison and co-operation with adjoining landowners and local authorities.
- (e) The rights and obligations of visitors using legal accessways to public conservation land will be signposted on all accessways which cross private land.
- (f) The department will liaise with local authorities and Transit New Zealand Ltd Transfund to endeavour to ensure that road access is maintained or improved to the boundaries of public conservation land, and will liaise with the Automobile Association to maintain or improve directional sign-posting to high use public conservation land.
- (g) Areas of land managed by the department may be closed to public entry for public safety and/or conservation management purposes. Where private land is involved (for example, as access to conservation areas, or with walkways) areas may be temporarily closed for farm management or other purposes in accordance with contractual provisions.
- (h) If areas are closed to public entry all reasonable steps will be taken by the department to make the public aware of the closure and the reasons for it. The department will work to open closed areas as rapidly as possible.
- (i) Where a site is determined to have washi tapu values meriting public exclusion, the department will take all steps to inform the public and prevent access to the site.
- (j) The relevant track schedules (appendix 5) will be followed to provide for management of recreation use within Rangataua, Tongariro and Erua forests and Rangitaiki frostflats.
- (k) Where natural and historic values are being adversely affected, management of visitor access such as using techniques to limit numbers of visitors or one-way tracks will be considered.
- (l) The department will investigate mechanisms to provide continued public access to the southern Kaimanawa Ranges in perpetuity.

- (m) A list of all current and solved access issues will be kept and updated by the department in conjunction with visitor groups and landowners.
- (n) The department will consider creating further New Zealand walkways to provide walking opportunities on private land.

#### 2 Aircraft Access

The term 'aircraft' in this strategy refers to fixed-wing aeroplanes, helicopters, microlights and balloons, but excludes non-motorised devices such as hang-gliders and parapents.

The Civil Aviation Authority controls the activities of all aircraft in the air but the department controls landings on public conservation land.

Aircraft, particularly helicopters, provide an important means of access for management purposes throughout the conservancy, with minimal physical impact compared to roading and some other means of access.

Aircraft are used increasingly by recreationists, particularly hunters, to gain access to areas of Kaimanawa Forest Park. Here, aircraft play an important role in wild animal control, enabling hunters to access areas that would otherwise be difficult to reach. Aerial access is regulated by having designated landing sites and only allowing commercial transport operators who hold concessions and people with permits for private non-commercial aircraft use to use these sites. As well as the designated sites, from time to time the department authorises use of additional sites in Kaimanawa Forest Park for management purposes, e.g., in the Rangitikei Remote Experience Zone (where aircraft access is normally excluded).

Over past years there has been demand for aerial access for recreation in Tongariro National Park. The National Parks Act 1980, through the Tongariro National Park by-laws, prohibits aircraft from landing, taking off and hovering in or over the park, except in an emergency, for wild animal control operations authorised by a concession, and for park management purposes. It important preserve to restrictions in recognition of national park's special natural and cultural values and the negative impact that aircraft can have on the experience of visitors.

Although there is no qualitative research identifying the effects of aircraft overflights and landing on users of public conservation land, there is significant anecdotal evidence of adverse effects. As pressure for access and tourism demand for scenic flights increase it is considered a priority that these matters

are researched and outcomes sought to protect the visitor experience where natural quiet is sought.

As a result of recent fires on public conservation land, Hughes 300 helicopters are now required to be fitted with guards which stop vegetation coming into contact with exhausts and manifolds when the helicopter is landing or hovering.

Aircraft operators are required to liaise with the department to undertake operations below 500 feet. An approved safety and operations plan must be prepared to the department's satisfaction particularly where the general public or facilities are overflown. This regulation is controlled by the Civil Aviation Authority. The department would consider an application against the broader aircraft policy.

#### **Objective**

• To permit aircraft landings on public conservation land for management and emergency purposes and where this enhances visitor opportunities without compromising the experience of others.

- (a) Landing of aircraft for recreation purposes will not be allowed in Tongariro National Park, as expressed in the Tongariro National Park Management Plan.
- (b) Aircraft will be permitted to access specific areas of the conservancy where this does not compromise natural or historic values or the use and enjoyment of the area by visitors (appendix 7).
- (c) The impact of approved aircraft use on the physical environment and visitor experience will be monitored.
- (d) The department will ensure it undertakes appropriate consultation with visitor groups in considering concessions for aircraft landings.
- (e) Aircraft operators will require a concession to operate on public conservation land.
- (f) The department will monitor aerial access levels and frequency to determine if and when unacceptable effects are occurring on the particular recreation opportunity spectrum setting and visitor experiences, and will impose, when necessary, restrictions such as limited levels of use or frequency of use of particular sites.
- (g) Aircraft landings within Tongariro Forest will be permited at the Sir Edmund Hillary Outdoor Pursuit Centre under the control of the centre. Specified sites in the Whanganui River and Whakapapa River will require permits for each landing. Decisions to grant permits will take into account impacts on other users of the forest.

- (h) Any Hughes 300 helicopters working on public conservation land must be fitted with approved exhaust manifold modification in accordance with national guidelines.
- (i) The department will seek appropriate restrictions, through Civil Aviation, on aircraft to maintain land-based visitor experiences and protection of natural values.
- (j) By-laws will be sought to provide for the objective above.
- (k) The department will ensure its use of aircraft for management purposes is essential and that other alternatives for access have been considered. It will also ensure that the use of public conservation land by the public is not adversely affected by the use of aircraft in management work.

#### 3 Motorised Off-Road Vehicles

Many owners of motorised off-road vehicles (including but not limited to motorbikes, quads or four-wheel-drive cars) have in the past used certain areas of land now administered by the department. However, with increased numbers of four wheel drive vehicles in the past decade, there is increased pressure for their use as off-road vehicles.

These vehicles can cause considerable damage to the physical environment and can be the cause of conflict with other visitors.

There are opportunities for these activities on land not administered by the department within the conservancy.

The department will only provide for motorised off-road vehicles on public conservation land where this will not compromise natural or historic values.

The Kaimanawa Forest Park Management Plan only permits motorised off-road vehicles on formed and maintained roads.

Within Tongariro National Park vehicle use is regulated by the National Parks Act 1980 and the Tongariro National Park Bylaws. Motorised off-road vehicles are only permitted on formed and maintained roads or for particular purposes as outlined in the management plan. This includes the use of over-snow vehicles in gazetted amenity areas. Over-snow vehicle use outside amenity areas is prohibited except for the department's management purposes and emergencies.

In the past, four-wheel-drive vehicles have been used for a range of reasons in Plateau Forests. With other motorised off-road vehicles available and on the increase, along with an increasing range of users, it is the department's view that four-wheel-drive vehicles should be confined to formed and maintained roads, with the exception of the 42 Traverse in Tongariro Forest. The department recognises the value of access opportunities created with the use of motorised off-road vehicles. It does not accept the use of public conservation land to provice for technical vehicle challenges as the effects of this use are significant.

The 42 Traverse will be managed in a partnership with recreation users to provide for a range of opportunities. A track management plan will be implemented in order to provide for both visitor experiences and protection of the area's natural values.

There is no conservation management plan in place for Tongariro Forest. The department has adopted a precautionary approach to visitor use, acknowledging traditional uses such as hunting, fishing, horse trekking and limited off-road motorised vehicle use, as well as some relatively new uses such as mountain biking and tramping. Species protection work in the forest focuses on kiwi protection and requires a whole ecosystem management approach which minimises human impacts. The impacts of four wheel drive vehicles on environmental and social values will need to be re-assessed during review of the conservation management strategy.

Tracks and routes identified in the track schedules (appendix 5) will be managed for use by motorised off-road vehicles. As the restoration of Plateau Forests enhances the conservation value of these sites, opportunities may diminish with time.

#### **Objective**

To provide for off-road vehicle use in appropriate areas only where this
will not compromise natural or historic values or the experience of other
visitors, and for management or emergency purposes.

- (a) Two- and four-wheel-drive vehicles will be required to stay on formed and maintained roads on public conservation land with the exception of the 42 Traverse track within Tongariro Forest and the Rangitaiki frostflat wetlands for hunting access for licensed gamebird hunters.
- (b) The management and maintenance of the 42 Traverse track will be undertaken in a partnership with user groups.
- (c) The department will lead the development of an operations plan for the 42 Traverse track, incorporating a track standard which takes account of identified users, a maintenance programme to ensure protection of both recreation experience and natural values, and monitoring to measure the success of the maintenance programme.

- (d) The 42 Traverse track will not be made available to four-wheel-drive vehicles until the management plan as outlined in (c), above, is in place.
- (e) The department may require four-wheel-drive vehicle users to obtain a permit for access to the 42 Traverse track.
- (f) The department may impose a maximum vehicle number per day.
- (g) Four-wheel-drive vehicle use of the 42 Traverse track will only be permitted from 1 December to 30 April.
- (h) The department may close the 42 Traverse track to vehicles at its discretion where weather conditions or other circumstances may compromise visitor use or natural values.
- (i) The department will not approve group events on public conservation land in excess of ten motorised off-road vehicles.
- (j) The programme identified in (b) (i) will be undertaken as a five-year trial to be reviewed in 2006. The focus of the review will be on the ability to maintain the 42 Traverse track to the standards set out in the management plan (c).
- (k) The department will ensure adverse impacts of motorised vehicles on waterways are avoided through appropriate physical management of sites.
- (l) Vehicle access to public conservation land will be maintained consistent with track schedules (appendix 5).
- (m) National standards developed by agencies such as forestry industry organisations, with regard to tracking for motorised vehicles, will be adopted.
- (n) Areas designated for motorised vehicle use, and any controls on their use, will be well publicised in any relevant material produced by the department, on roadend information boards and at appropriate track ends.
- (o) The impacts of motorised vehicle use on public conservation land will be closely monitored. If natural or historic values are threatened, vehicle use may be restricted at the discretion of the conservator.
- (p) The department, through its input into district plans, will advocate controls on the use of motorised vehicles in sensitive areas with high natural or historic values.
- (q) The department will continue to work with off-road vehicle visitor groups (clubs) to assist in the maintenance of tracks identified in track schedules (appendix 5) to the appropriate standard.

- (r) The department will prepare by-laws to achieve the objective above and will undertake regular inspection and monitoring to ensure compliance with the implementation provisions.
- (s) The department will endeavour to educate vehicle users in responsible behaviour and the significance of the natural values of the area.

#### 4 Mountain Bikes

Mountain biking has become increasingly popular in recent years. It has been acknowledged as a legitimate recreational use of conservation land where it is consistent with the protection of natural and historic values and conflict with visitor groups can be managed.

In areas where mountain bikers are currently permitted the department applies the guidelines for mountain bike use to determine on a case-by-case basis what tracks are to be used. Key criteria are the likelihood of damage to natural resources, damage to a track itself, and conflicts with other groups such as walkers, horse riders and motorised vehicle visitors.

A range of undeveloped opportunities exists for mountain biking on and off public conservation land where natural resources are not under threat and visitor conflict is unlikely. The department continues to consider these opportunities when approached by visitor groups.

#### **Objective**

 To provide mountain bike opportunities on public conservation land where neither natural and historic values nor the experience of other visitors are compromised.

- (a) Mountain bike use will not be permitted off formed and maintained roads and other tracks specified in the Tongariro National Park and Kaimanawa Forest Park management plans.
- (b) Impacts of mountain bike use on the physical environment and visitor experience will be monitored. If natural or historic values are threatened or if significant conflicts arise with other visitors, their use may be restricted.
- (c) National departmental guidelines on mountain bike use will apply in instances where a demand for mountain bike access becomes apparent and a decision to authorise or not authorise such use is required.
- (d) Areas and specific tracks designated for mountain bike use and any controls on their use will be well publicised in any relevant material

- produced by the department, on roadend information boards and at appropriate track ends.
- (e) The department, through its input into district plans, will advocate controls on use of mountain bikes in sensitive areas of high natural value.
- (f) Positive solutions to visitor conflicts will be facilitated.
- (g) Mountain biking will continue to be permitted on the tracks listed in appendix 5.

#### 5 Horses

There is demand for horse trekking in natural areas, which provide a very different experience to rural landscapes.

Horse trekking can have significant impacts on natural values, damaging fragile pumice soils and walking tracks and adding to maintenance requirements. It can conflict with other uses such as walking, mountain biking and off-road vehicle use. Horses can also spread plant pests and eat rare or endangered plants.

# **Objective**

 To provide for horse trekking opportunities on public conservation land where neither natural and historic values nor the experience of other visitors are compromised.

- (a) Horses will be permitted on formed roads on public conservation land, except within Tongariro National Park where horses are completely excluded.
- (b) By-laws will be developed to prohibit the use of horses off formed roads within Kaimanawa Forest Park in keeping with the existing policies outlined in the Kaimanawa Forest Park Management Plan.
- (c) Use of tracks by horse trekkers must be consistent with the track schedules (appendix 5).
- (d) Impact of horse trekking on the physical environment and visitor experience will be monitored. Use of horses may be further restricted if natural values are threatened.
- (e) An assessment of horse trekking opportunities within the conservancy will be undertaken in consultation with interested visitor groups, so that areas where horses may be taken without compromising natural values are identified.

#### 6 Rock-climbing/Abseiling

In recent years rock-climbing and abseiling have occurred on a number of sites on public conservation land, primarily within Tongariro National Park and various reserves around Lake Taupo. These sites have experienced significant use by individuals and organised instruction groups.

A key issue with many of the popular rock-climbing sites is that they have cultural significance to tangata whenua.

The impacts of concentrated rock-climbing use include vegetation clearance, heavy use of foot access tracks to and about rock faces, and placement of climbing hardware on rock faces. These are generally restricted to small areas and can be minimised by sensible management.

Rock-climbing and abseiling provide for public enjoyment across a range of visitor groups including clubs, individuals, schools and other education providers.

#### **Objective**

 To allow rock-climbing and abseiling on public conservation land at appropriate locations where the impacts on natural and cultural values can be managed.

- (a) The department will support the use of locations for rock climbing and abseiling where impacts on natural and historic values are minimal or where those values can be protected by way of co-operation and liaison with users and other interested parties.
- (b) Tangata whenua will be asked to identify locations where rock-climbing is acceptable.
- (c) Where a rock climbing/abseiling area has been identified, the department will, following consultation with the tangata whenua and the New Zealand Alpine Club, formulate a use policy which states the guidelines under which climbing can take place in the area. Such guidelines will take into account the natural, cultural and recreational values of the area.
- (d) Bolting or placement of permanent hardware on rock-climbing and abseiling sites will not be permitted except where the natural values of the site are not affected and following consultation with the New Zealand Alpine Club.
- (e) Where bolts or other permanent hardware are to be placed, all reasonable efforts will be made to minimise their visibility and environmental impact.
- (f) Clearance of vegetation for the development of rock-climbing routes must be approved by the department. Within Tongariro National Park it will not be approved.

#### 7 Organised Club/Group or Public Events

Public conservation land is used by organised groups such as recreation clubs and schools, and by the community for one-off events where concessions are not required.

If an organised use involves low numbers, is an activity commonly undertaken in an area, will not create an undue concentration of people in a specific area and has no effect on natural or historic values, such use is welcome on conservation land.

Use by larger groups, such as schools, may have an impact on other visitors or on facilities which receive high numbers of visitors. Off-track use can have significant impacts on the physical environment. At present this use occurs mainly in Tongariro National Park but it is spreading to other areas within the conservancy.

#### **Objective**

• To allow organised club/group or event use of public conservation land where no concession is required and the protection of natural and historic values is assured.

#### Implementation

- (a) To minimise impacts on the environment and other visitors, the department will promote the use of areas of public conservation land other than Tongariro National Park with the organisers of group activities.
- (b) Restrictions on organised use may be applied through by-laws and regulations which limit numbers, timing of visit and locations visited in order to manage pressure on the environment and on high-use facilities.
- (c) In line with the department's policy on commercial guiding, instructor or supervisor ratios may be imposed on group activities for safety purposes.

#### 8 Firearms and Other Weapons

The carrying and use of weapons on public land is governed by the Wild Animal Control Act 1977, the Conservation Act 1987, National Parks Act 1980, Reserves Act 1979, and the Arms Act 1993. The department issues express permission, in the form of hunting permits, to visitors who wish to carry weapons on public conservation land for the purpose of hunting and killing wild animals or gamebirds.

Hunters make a significant contribution to the control of deer, pigs and goats in the conservancy. Permits for hunting wild animals are issued on request for the whole conservancy for periods of up to four months. Numbers of hunters in any one place at any one time are unlimited by such a system.

Permits for gamebird hunting are issued for the duration of the gamebird hunting season for all areas where the harvesting of gamebird species is considered appropriate. Gamebird hunting is managed by fish and game councils and close liaison with them is required where this activity occurs on public conservation land.

#### **Objectives**

• To authorise the use of firearms and other weapons on public conservation land where appropriate for legitimate recreational or commercial hunting and gamebird shooting purposes.

#### Implementation

- (a) Authorisation will be required to take a firearm or other weapon onto public conservation land. The authorisation will stipulate the conditions of use of that firearm or weapon.
- (b) Safe use of all firearms and weapons on public conservation land will be encouraged. Appropriate firearm etiquette and safety procedures will be promoted.
- (c) Use of firearms and other weapons will be restricted in areas where their use is deemed inappropriate.
- (d) Except under special permission rimfire rifles will not be permitted on public conservation land.
- (e) Areas where or periods when the use of firearms or other weapons is considered inappropriate will be identified and specifically excluded from all hunting permits.
- (f) The conservancy will liaise closely with the Eastern, Hawkes Bay, Taranaki and Auckland/Waikato fish and game councils where appropriate over gamebird hunting on public conservation land.
- (g) Gamebird hunting is not permitted in Tongariro National Park or in scenic reserves.

#### 9 **Domestic Animals** (other than horses)

Departmental staff use dogs periodically for work-related purposes such as wild animal control and location of protected species. Dogs are used for safety purposes – as seeing-eye-dogs, for example, or in search and rescue operations.

Visitors bring dogs onto public conservation land for a variety of purposes, primarily because they contribute to the recreation experience.

Dogs which are not kept under control can disturb and kill native wildlife, particularly ground-dwelling birds, and their presence can conflict with other visitors.

Recent dog control legislation provides for dog access to public conservation land. The department is required to assess the effects of dogs on the values of all areas it manages and then to identify areas where access for dogs should be open, controlled or prohibited. Departmental policy will take account of the need to protect natural and historic values and the interests of other visitors.

#### **Objective**

To maintain indigenous biodiversity and visitor experiences through the appropriate management of domestic animals on public conservation land.

- (a) The department will identify areas of public conservation land where dogs may be taken without compromising natural, historic or recreation values. Where these values would be compromised, dogs will only be allowed for authorised management purposes, search and rescue purposes, authorised wild animal control or if they are seeing-eye-dogs.
- Areas where dogs are allowed will be well publicised on sign-posts, (b) permits, maps, etc.
- (c) Where controlled access for dogs is permitted there will be a limit of one dog per visitor unless specific approval is given for more, for such activities as pig hunting.
- (d) Dogs will not be allowed inside or under huts, except for seeing-eye-dogs.
- If natural, historic or recreation values are found to be threatened by dogs (e) their use may be further restricted.
- (f) Other pets, such as cats and ferrets, will not be permitted on public conservation land.
- The taking of any domestic animals into Tongariro National Park except (g) as listed in (a), above, is prohibited.
- The department will ensure that visitor groups, particularly hunting (h) groups, understand this policy and any restrictions.

## 10 Visitor Health and Safety

All outdoor recreation activities involve an element of risk. Although individuals are primarily responsible for their own safety, all reasonable precautions will be taken by the department to ensure the safety and protection of visitors to public conservation land.

#### **Objective**

• To endeavour to ensure that visitors to public conservation land are aware of hazards and take appropriate precautions to minimise risks.

- (a) All reasonable precautions will be taken to minimise risks to visitors.
- (b) Visitor health and safety will be promoted through education and provision of information about potential problems or dangers.
- (c) Facilities will be carefully sited and maintained to a safe standard. New toilet facilities will be designed and sited to protect waterways.
- (d) Field staff will be trained in first aid and relevant outdoor skills.
- (e) The department will continue to assist and co-operate with search and rescue authorities and other authorities having responsibilities for public health and safety.
- (f) Concession documents will make clear that concessionaires are responsible for the safety of their clients.

# 3.5.3 Visitor Facilities Provided by the Department

The department administers approximately 18 million dollars worth of built infrastructure within the conservancy and retains its role as the key provider of tourism resources, both natural and developed, within the region. Facilities range from intensive developments like those at Huka Falls and Whakapapa Visitor Centre through to roads, tracks, huts, car parks and camping areas.

Facilities installed primarily for day use are concentrated at the road access points in Tongariro National Park and around the eastern shores of Lake Taupo. Backcountry facilities are provided in Tongariro National Park and Kaimanawa Forest Park.

There is a constant need to assess whether the facilities provided by the department remain appropriate in light of changing visitor and cultural values and the competing demands for the department's funds. Demands for new facilities or services must be carefully considered given the need to efficiently manage those already existing at adequate standards and in ways that minimise impacts.

#### **Objectives**

- To enhance visitor experience and minimise visitor impact on public conservation land.
- To maintain a range of facilities for different visitor groups in appropriate locations.

- (a) Priorities for maintenance, upgrading, closure or removal of existing recreation facilities will be set through the national visitor asset management system, and with input from interested parties and the general public.
- (b) The following factors will be taken into account in determining the provision of recreation facilities:
  - the natural and cultural values of the area;
  - the potential impact of recreation use on these values;
  - the potential impact of recreation facilities and their use on existing visitors to the area;
  - the availability of recreation opportunities in other areas of the conservancy and in adjacent conservancies;
  - demand;
  - public safety;
  - benefits gained by the department, such as animal control undertaken by recreational hunters;
  - the opportunity to advocate conservation to visitors;

- in the case of recreation reserves, the purpose for which the reserve is held;
- the findings of any visitor research undertaken by the department, on its behalf, or independently of it.
- (c) The department will carry out environmental impact assessments prior to implementing any facility upgrading or development projects of a substantial size or deemed likely to have some effect on natural or historic values.
- (d) No facilities or tracks will be placed or, where already existing, maintained, within remote experience and wilderness experience zones.
- (e) More emphasis will be given to provision of quality day-use facilities close to urban areas and at roadends in backcountry drive-in recreation opportunity spectrum settings.
- (f) Visitor use will be systematically monitored using appropriate participant counting and research methods in order to assist facility management priorities and decisions.
- (g) Where there is little demand for an existing track according to its intended use, or if natural values are being adversely affected, a full assessment of the need for the track will be undertaken to determine whether to close and restore the track and its margins to original indigenous habitat.
- (h) With the exception of Aratiatia Recreation Reserve where concessionaire camp group opportunities are being considered, no additional huts or fully serviced camping areas will be provided on public conservation land.
- (i) Huts and bunks will continue to be available to all visitors on a first-come, first-served basis. If the need develops for a booking system or some other system to limit numbers in future, the department will undertake full consultation with its associates.
- (j) At high-use facilities where physical, environmental and/or social impacts are escalating the department may implement management techniques to control or limit use in order to ensure that impacts on natural or historic values and effects on the enjoyment of visitors are minimised. The Tongariro/Taupo Conservation Board will be asked to give guidance to the department on introducing such regulatory systems at the appropriate time.
- (k) Concessionaires and their clients will not be given exclusive or priority use of any public facilities.

# 3.6 Public Involvement

#### 3.6.1 Introduction

Public awareness and community involvement are crucial aspects of advocating for conservation. Sections 6(b), (c) and (d) of the Conservation Act 1987 give the department the ability to advocate conservation of natural and historic resources generally, to promote the benefits to present and future generations of the conservation of natural and historic resources (particularly in New Zealand, but including Antarctica and overseas), and to prepare, distribute and promote educational and promotional material relating to conservation.

The department's strategic focus is on creating public understanding, encouraging an appreciation of conservation and building relationships with the community.

# 3.6.2 Visitor and Volunteer Programmes

A comprehensive summer programme has operated in the conservancy for more than 30 years, with valuable assistance from members of the Tongariro Natural History Society and other volunteers.

There is increasing public demand to be involved in conservation. Volunteer contribution is vital to the department and occurs across a spectrum from physical plant pest control through to detailed monitoring and scientific analysis to assist in the development of policy. Current annual conservation volunteer inputs are equivalent to 14 additional full-time staff.

Recent volunteer work includes *Pinus contorta* eradication, hut warden work on the Tongariro Crossing in Tongariro National Park, species protection work in Kaimanawa Forest Park, conservancy-wide vegetation monitoring, summer programme guiding, Tongariro National History Society volunteer projects, Old Waihohonu Hut restoration and interpretation, and Huka Falls and Craters of the Moon Trust tourist site management.

#### **Objective**

 To increase awareness of and active support for conservation through visitor and volunteer programmes.

# Implementation

(a) The summer programme will continue to emphasise active participation and involvement in conservation activities.

- (b) Opportunities will be provided for members of the public to participate in conservation activities.
- (c) Joint venture opportunities with the Tongariro Natural History Society, outdoor education organisations, local authorities, non-Government organisations and concessionaires will be arranged.
- (d) The department will work with its key associates on an annual basis to develop its volunteer programme. The volunteer programme will be administered by the Tongariro Natural History Society.

#### 3.6.3 Conservation Awareness

There are many opportunities to promote conservation and increase public understanding of the work of the department in the conservancy.

### They include:

- providing appropriate information and facilities to encourage visitors to conservation land and to enhance their understanding of the conservation aspects of these areas and the work of the department;
- working with education providers and educational groups visiting conservation areas to develop educational programmes;
- providing information on conservation issues through a range of media, including the news media;
- running events and campaigns designed to generate public support and improve understanding of conservation issues.

### **Objective**

• To provide information, through a range of media, which will increase public understanding of conservation, enhance public enjoyment of public conservation land and appreciation of its natural and historic values and increase public understanding of the work of the department.

- (a) The conservancy's public awareness strategy will be maintained in line with national policy and the local community context.
- (b) Local recreation opportunities on public conservation land will be promoted where they do not have an adverse effect on the environment or existing visitors.
- (c) Information on local recreation opportunities, safety and environmental care will be provided through the department's visitor centres and through other outlets as appropriate.
- (d) Information on the department's protection programmes will be provided through Department of Conservation visitor centres and through networks of associates with an interest in this work.
- (e) Assistance will be sought from tangata whenua in the development of brochures and displays to ensure a bicultural perspective.
- (f) The department will work with educators and others with an interest in conservation education to ensure a service is provided to local schools.

(g)	The department will provide a range of resources and services to visiting school groups.
(h)	Information will be supplied regularly to news media on conservation issues and the department's campaigns and initiatives.

# 3.6.4 Associate/Community Liaison and Involvement

The maintenance and enhancement of links with key associates is very important. These groups include tangata whenua, environmental groups, visitor groups, landowners, other central Government agencies, educational institutes, local authorities and concessionaires.

It is important that the department is accessible to these groups. Working together can resolve issues of mutual interest, provide an exchange of information, establish good working relationships and may provide extra resources for conservation work through volunteer input.

# **Objective**

• To develop and maintain support for conservation initiatives on and off public conservation land.

- (a) Liaison with key interest groups interested in the conservancy will be maintained through a range of media as appropriate.
- (b) Strong links will be maintained with the news media through provision of information and prompt responses to requests.
- (c) Concessionaires will be encouraged to provide information to their clients on conservation issues and wise use of public conservation land. Standards will be set and monitored regularly. Meetings with concessionaires will be held at regular intervals.
- (d) An annual programme of consultation will be established with associates, focusing on the department's key functions.
- (e) The department will respond to sponsorship offers and work effectively with sponsors for mutual benefit.
- (f) The department will create opportunities for and encourage community initiatives.
- (g) The department will provide assistance and expertise where work undertaken by a community group achieves protection of natural or historic values and the department has the resources available.

# 3.6.5 Memorials, Plaques and Cairns, Spreading of Ashes

The department has many requests from the community to place memorials, plaques and cairns on public conservation land. There are also requests by families of deceased to spread ashes within public conservation land.

# **Objective**

 To acknowledge community values and the requirement to identify with special events or cultural traditions while minimising impacts on natural or cultural values.

- (a) Permission to spread ashes on public conservation land will be required from the department.
- (b) The department will consult with iwi prior to any decision made to allow the spreading of ashes.
- (c) All existing authorised memorials and plaques will be maintained in their present locations unless destroyed by natural events.
- (d) Additional memorials, monuments or cairns will only be permitted in exceptional circumstances.
- (e) The wording, design and placement of memorials, plaques, cairns and headstones must be approved by the department.

# 3.7 Kaupapa Maori

# 3.7.1 Introduction

In undertaking its mission the department recognises the Treaty of Waitangi as a founding document of New Zealand. Section 4 of the Conservation Act 1987 states:

"This Act shall so be interpreted and administered as to give effect to the principles of the Treaty of Waitangi."

# 3.7.2 Principles of the Treaty of Waitangi

Note that the principles of the Treaty are to be applied, not its literal words. The recognised authorities responsible for determining Treaty principles are the Courts and the Waitangi Tribunal. Based on decisions and findings from these sources, nine important principles have been identified as having broad application in the Tongariro/Taupo Conservancy. In summary they are:

Kawanatanga The principle of government

Tino rangatiratanga The principle of traditional iwi authority

Exclusive and undisturbed The principle of exclusive and undisturbed

possession possession

Oritetanga The principle of equality

Kaitiakitanga The principle of guardianship Whakawhanaungatanga The principle of partnership

Tautiaki ngangahau The principle of active protection

He here kia mohio

The principle of informed decision making

Whakatika i te mea he The principle of redress

Note that the Courts and the Tribunal concur the spirit of the Treaty is what matters. Treaty principles will therefore continue to evolve and reflect changes in circumstances over time. Accordingly they should not be seen as exhaustive or definitive.

The application of these principles and the achievement of their associated objectives will depend on the particular circumstances of each case including the significance to iwi of the land, resource or taonga in question, and the statutory framework. The way in which the principles and their objectives are stated provides direction for the broader machinery provisions of the conservation management strategy.

# 3.7.3 *He Kaupapa Rangatira* - A Joint Initiative

Following final approval of the conservation management strategy the department will initiate the development of *He Kaupapa Rangatira*.

This development will enable the department and iwi within the conservancy to define and exercise their respective responsibilities with a minimum of conflict. Over time this will help the parties involved to achieve the conservation policies, actions and outcomes sought by them.

He Kanpapa Rangatira is to provide the principal means by which the Treaty principles and objectives outlined in this chapter will be implemented and achieved. The department will facilitate the development of He Kanpapa Rangatira together with iwi, in accordance with the principle of whakawhanaungatanga or partnership. Subsequent implementation may occur at an iwi, hapu or whanau level.

The following provisions set out the ways in which He Kaupapa Rangatira will be developed:

- The department is to initiate the development of a framework document within two months of obtaining final approval for the conservation management strategy. This is to be completed with Ngati Tuwharetoa in the first instance, within four months of the strategy's approval.
- The parties are to complete a draft of *He Kaupapa Rangatira* within eight months of the conservation management strategy's approval. The draft is to provide for giving effect to the principles of the Treaty of Waitangi identified, and achieving the objectives set out in this chapter. It will also contain protocols for consultation with iwi and identify issues of specific concern to them. Provision is to be made for monitoring and reporting processes and for iwi participation within them.
- Within one month of completing the draft the department will consult with other iwi in the conservancy. The department will assess the degree to which they, Ngati Rangi and Ngati Tahu, wish to be involved in the development of a final document, or documents, satisfactory to the parties involved.
- 4 He Kaupapa Rangatira will only become operative by signing off between the individual iwi authorities for Ngati Tuwharetoa, Ngati Rangi and Ngati Tahu on the one hand and the conservator on the other. (It is possible that all the parties may sign up to the one unified document, or three individual and separate documents. Whatever the outcome however, unified or separate, the document/s will be called He Kaupapa Rangatira.)
- It is the goal of the department that *He Kaupapa Rangatira* (unified or separate) shall become operative within 12 months of obtaining final approval for the conservation management strategy.
- The conservator, kaupapa atawhai manager and relevant iwi authority will monitor the implementation of *He Kaupapa Rangatira* and report to iwi on an annual basis.

#### 3.7.4 Principles of the Treaty of Waitangi and Objectives

1 **Kawanatanga** (Article I of the Treaty)

The authority to make laws for the good order and security of the country.

# **Objective**

To manage the Tongariro/Taupo Conservancy in accordance with the Conservation Act 1987 and the acts listed in the first Schedule to the Conservation Act and to interpret and administer these acts so as to give effect to the principles of the Treaty of Waitangi.

Note: In the Whales Case (Ngai Tahu Maori Trust Board v The Director General of Conservation) the Court of Appeal ruled that section 4 of the Conservation Act 1987 applied to all the acts in the First Schedule of the Conservation Act 1987 to the extent that the provisions of section 4 were not inconsistent with the acts of the First Schedule.

2 **Tino Rangatiratanga** (Article II of the Treaty, Maori version)

The right of Maori to exercise traditional authority and control over their land, resources and taonga.

# **Objectives**

- To recognise and actively promote the exercise by iwi of tino rangatiratanga over their land and resources and taonga of significance to them.
- To identify with iwi opportunities for them to exercise an effective degree of control over traditional resources and taonga that are administered by the department, where this is not inconsistent with the department's legislation.

Note: An effective degree of control may vary from full authority at one end of the spectrum to a right to be consulted at the other end.

Exclusive and Undisturbed Possession (Article II of the Treaty - English 3 version)

The right of Maori to exclusive and undisturbed possession of their land, forests, estates and fisheries.

# **Objective**

To recognise, particularly when the department is exercising its advocacy function, the right of Maori to exclusive and undisturbed possession of land in Maori title, and resources and other taonga of significance to iwi.

# 4 **Oritetanga** (Article III of the Treaty, both versions)

The right of Maori and non-Maori alike to equality of treatment and the privileges and responsibilities of citizenship.

# **Objective**

• To ensure that tangata whenua as individual citizens and taxpayers receive fair and equal access to the resources of the conservancy and the benefits offered by the department to the general public.

# 5 **Kaitiakitanga** (Duty of guardianship/custodianship/stewardship)

The right of Maori to undertake their duty of kaitiakitanga over their land and resources and taonga of significance to them.

# **Objectives**

- To recognise and actively promote the exercise of kaitiakitanga by iwi in respect of their land including resources and taonga of significance to them and under the control of the department.
- To facilitate the exercise of kaitiakitanga by iwi in respect of traditional resources and taonga of significance to them where these are administered by the department.

## 6 **Whakawhanaungatanga** (Partnership and relationships)

The Treaty provides for a partnership between Maori and the Crown, which requires the parties to afford each other reasonable co-operation and utmost good faith, in accordance with their Treaty obligations.

## **Objectives**

- To identify with iwi the means to provide them with opportunities for partnership and participation in decision making in conservation management generally, particularly in respect of traditional land, resources and taonga administered by the department.
- To actively develop a relationship of co-operation, utmost good faith and mutual respect between the department and iwi and to reflect the

importance and quality of that relationship in the culture of the department and all of its operations.

# 7 Tautiaki Ngangahau (Duty of active protection)

The duty of the Crown to ensure the active protection of taonga for as long as Maori so wish it.

# **Objective**

• To actively protect the interests of iwi in respect of land, resources and taonga administered by the department or under the department's control where these are considered by iwi to be of significance to them.

# 8 **He Here Kia Mohio** (Duty to be informed)

The duty of the Crown to make informed decisions.

# **Objective**

• To engage in regular, active and meaningful consultation with iwi in respect of the work of the conservancy.

# 9 Whakatika i te Mea He (Duty of redress)

The duty of the Crown to remedy past breaches of the Treaty and to prevent further breaches.

# **Objectives**

- To avoid any action which might frustrate or prevent redress of Treaty claims.
- To actively assist the Government in the resolution of Treaty claims where these relate to the conservancy.
- To address genuinely any grievances which tangata whenua might bring to the attention of the department, formally or informally, in respect of any act or omission of the department in the administration of the conservancy.

# 3.7.5 Development Issues for He Kaupapa Rangatira

Key issues to be addressed in the development of *He Kaupapa Rangatira* will include, but are not restricted to, processes which provide for participation by iwi in conservation management generally and, more particularly, participation in the following areas:

- consultation between the parties;
- participation in conservation management projects;
- participation in the conservancy's annual business planning;
- sharing of resource information;
- in exercising powers under the Resource Management Act 1991, recognition of the parties' perspectives and sharing of resources;
- in exercising powers under the Resource Management Act 1991, development of resource management approaches to achieve the protection of taonga;
- involvement in the process of considering concession applications;
- iwi involvement in concession opportunities;
- cultural resource allocation;
- management of waahi tapu;
- participation by iwi in the preparation of management plans, strategies and policy;
- development of projects which give effect to the principles of tino rangatiratanga and kaitiakitanga;
- involvement in visitor services to achieve ongoing protection of taonga;
- identification of restoration projects for iwi participation;
- use of tikanga Maori in the department's work;
- staff development in cultural learning;
- departmental involvement in relevant Treaty claims.

# 3.8 Concessions

A concession is an official authorisation to operate in an area managed by the department. It may be in the form of a lease, licence, permit or easement.

The concession system helps the department to ensure that the various concession activities are compatible with the primary aim of protecting public conservation land and other resources. It also helps to make sure that services and facilities provided for visitors are appropriate, of a suitable standard and that other activities do not conflict with visitor enjoyment.

Part iii(b) of the Conservation Act 1987, the National Parks Act 1980, and the Reserves Act 1977 enable concessions to be granted and provide the framework for the way concessions are managed.

A lease is a grant of an exclusive interest in land that gives exclusive possession of the land and makes provision for any activity on the land that the lessee is permitted to carry out. Leases will not be granted unless the applicant can demonstrate that exclusive possession is necessary to protect public safety, to protect the physical security of the activity or for the competent operation of the activity.

A licence is either a profit à prendre (the right to take produce from land and/or a grazing right) or other grant that gives a non-exclusive interest in land, or a grant that makes provision for any activity on the land that the licensee is permitted to carry out. Leases or licences may be granted for periods of up to 30 years including renewals. In exceptional circumstances they can be granted for 60 years.

A permit is a grant of rights to undertake an activity that does not require an interest in land. A permit may be granted for up to five years without any right of renewal.

An easement is a grant of an interest in land which gives the grantee the right to some benefit from the land, such as a right of way. An easement may be granted for up to 30 years. In exceptional circumstances it may be granted for up to 60 years or even longer if it provides a right of way to landlocked land. If the easement is for a public work, then the term of the easement can be for the duration of the public work.

The intention to grant a lease or a licence must be publicly advertised, but there is discretion about advertising permits or easements.

## 3.8.1 Recreation Concessions

Recreation and tourism concessions can assist the department to offer a wider range of opportunities for outdoor recreation through the provision of facilities and services. These recreation opportunities will be complementary to those provided directly by the department.

Recreation concessions are managed under the Conservation Act 1987. The department has produced standard operating procedures for concessions which cover recreation and tourism concessions granted under the National Parks, Reserves and Conservation acts. These deal with planning for and classification of concessions, requirements for concession applications and conditions in concession agreements.

The existing management plans for Tongariro National Park and Kaimanawa Forest Park include concessions policies. These plans reflect the impact of existing recreation concessions and the need to protect the special values of these areas.

Concessions currently operating in the conservancy include:

- ski areas;
- hotels, club lodges;
- guided walking/tramping/instruction/caving;
- guided alpine activities/instruction;
- guided hunting trips;
- guided mountain bike trips;
- guided rafting/jet boat/kayak trips;
- guided fishing;
- guided horse trekking;
- road transport services;
- aerial transport services;
- chain hire/fitting services;
- multi-sport events;
- quad bike trips.

High investment intensive commercial activity is focused at Whakapapa village and ski area and Turoa ski area in Tongariro National Park. Elsewhere commercial activities tend to be small scale, low impact, sometimes infrequent and spread over wide areas.

It is anticipated that increasing tourism will prompt more interest from the commercial sector in providing recreation opportunities on public conservation land.

Apart from existing facilities for commercial use within the conservancy, it is not considered appropriate to grant concessions for development of new buildings and structures. Highly developed commercial uses, outside of the amenity areas or ski area licence areas, are unacceptable because of their impact on relatively small and fragmented areas of public conservation land. The department also believes there is a need to limit infrastructure development to achieve protection of the recreation values of existing visitors.

Additional concessionaire accommodation including serviced camping areas and concessionaire overnight accommodation should be developed in adjacent existing towns, not within the boundaries of public conservation land.

# **Objective**

To foster visitor enjoyment of land managed by the department through authorising commercial recreation and tourism activities which are compatible with the natural and historic values of any area and which do not reduce the enjoyment of these values by other visitors.

- The department will assess and process applications for recreation concessions (a) on public conservation land in accordance with the Conservation Act 1987 and standard operating procedures in place at the time.
- (b) The department will consider any application for commercial recreation use of public conservation land in Kaimanawa Forest Park or Tongariro National Park in accordance with the policies set out in the respective management plans for those areas.
- (c) Recreation and tourism concessions must conform with all other objectives and implementation provisions of this document.
- The department will not authorise the development of new or further (d) concessionaire overnight accommodation infrastructure unless permitted in terms of existing lease agreements at the time this strategy becomes operative or unless significant conservation benefits will be had.
- The department will not grant any further concessions over an area if it is (e) considered that an increase in use will adversely affect natural or historic resources or cause adverse and irresolvable conflict with other visitors to that area.
- (f) Public consultation and Tongariro/Taupo Conservation Board input will be sought for all advertised applications.
- The department will establish processes with iwi for their involvement in (g) concession applications through He Kaupapa Rangatira.
- The department will closely monitor the impacts of existing commercial (h) recreation operators on public conservation land to ensure that conditions of operations are adhered to. Monitoring will include ongoing assessment of the cumulative effects of concessions.
- (i) The department will work closely with local tourism organisations to assess visitor demand. If deemed to be appropriate and of benefit to conservation the department may advertise for interest in operating a particular type of commercial recreation activity on public conservation land.
- Concessionaires and their clients may share facilities such as huts and camping (j) grounds on a 'first-come, first-served basis' with other visitors (unless otherwise determined by the department) but will not be given exclusive use of any public facility.
- Concessionaires must take primary responsibility for the safety of their clients (k) and will comply with all relevant legislation.
- (1) The department will maintain close liaison with concessionaires.
- The department will investigate all reports of unauthorised commercial activities (m)on public conservation land and where necessary take action to remove the activity and to prosecute for any offence.

# 1 Guiding

Except where significant natural and historic values may be adversely affected, the department will generally support guiding concessions which enhance the experience and safety of visitors to public conservation land without affecting other park visitors.

Activities including but not limited to high altitude tramping, alpine guiding, avalanche training, snowcaving, rock-climbing, motorised vehicle use, caving, mountain biking, ski touring, and hunting have an element of risk which needs to be appropriately mitigated by the guide on behalf of the client.

# **Objective**

• To ensure that guiding concessionaires provide for an enhanced visitor experience while ensuring general visitor safety.

- (a) Concessionaires must conform with the general concessions policies and management plans or strategies for the conservancy.
- (b) Concessionaires must demonstrate that they as well as their employees have an appropriate mix of skills, experience and qualifications.
- (c) Applicants for a concession may wish to seek support from referees to confirm their skills and experience in lieu of national standard qualifications. These referees will need standing in the appropriate field for which a concession is sought.
- (d) The department may seek external advice to confirm the suitability of an applicant.
- (e) The concessionaire's safety and operations plan will outline criteria under which guides will be employed. This plan may be independently audited by an appropriately qualified assessor chosen by the department.
- (f) Any concession approved must have an up-to-date schedule of approved guides. Concessionaires must inform the department whenever their employee mix changes.
- (g) The department will monitor the performance of individual concessionaires against the conditions within their concession documents. This will be cost recoverable against the concessionaire.
- (h) The department will require visitor returns from concessionaires regarding their clients. This information will be used to audit guide/client ratios where set in the safety and operations plan and for building visitor use patterns for management purposes.

# 3.8.2 Non-Recreation Concessions

Public conservation land is managed for the purpose for which it is set aside. In the case of national parks, conservation parks and reserves administered under the Reserves Act 1977, those purposes are well defined in statute. Generally the focus is on protection or public use focused around appreciating the values of sites. The sustainable management ethic is the bottom line for conservation management. Protection and preservation of natural and historic values is the key philosophy on which land is managed.

A significant number of the concession applications received by the department are for activities that are not aligned to the purpose for which the land is set aside. An example is telecommunication facilities located on high points within conservation areas in order to maximise communication lines.

Recreation-oriented concessions have a range of positive and negative effects on the land or users of the land but it is generally the case that non-recreation concessions have little or no value in the context of the purpose for which the land is managed, and as such may have a significant adverse effect. This is at its greatest in relatively pristine or pristine environments where natural values are compromised or visitors' experiences are diminished.

The majority of visitors to public conservation land have a passive relationship with the landscape, either walking through it, visiting its peripheries or using existing infrastructure in order to meet their needs, consistent with the land status. This is not the case with non-recreation concessions.

The landscapes across the conservancy have a varying capacity to absorb effects of human interaction and requirements of concessionaires, particularly where infrastructure is required. Fragile alpine vegetated environments or threatened species are clearly not able to absorb impacts easily whereas our remnant exotic forests or larger conservation areas such as Kaimanawa Forest Park with low visitor numbers are coping with impacts at existing levels. A number of environments, including Tongariro National Park with its dual World Heritage status, require their pristine nature or special character to be protected and nurtured in perpetuity.

The commercial non-recreation use in the conservancy can be broadly but not exclusively categorised into the following areas: grazing of stock; military use; telecommunication sites; easements; exclusive occupation including private buildings or structures and utilities; prospecting, exploration and mining; power generation; beekeeping exotic forests; sphagnum moss; advertising, promotion and filming; and wild animal recovery operations.

# **Objective**

• To allow commercial non-recreation use of public conservation land only where it is consistent with the purpose for which the land is held, with the protection of natural and historic values and with the enjoyment of other visitors.

# Implementation

- (a) Applications for activities with an adverse effect on pristine environments will be declined.
- (b) Applications for activities with an adverse effect on significant cultural values or enjoyment of visitors will be declined.

## 1 Grazing

There are few unutilised grazing opportunities on public conservation land within the conservancy. Existing concessions generally cover conservation areas or recreation reserves where grazing is necessary to control grass and plant pests and to allow easy public access and use.

# **Objective**

• To grant new grazing rights and re-issue existing rights only if grazing will not compromise natural, historic or recreation values and is consistent with the purpose for which the land is held.

# Implementation

- (a) Proposed use must be consistent with any relevant management plans.
- (b) New and renewed grazing rights will be documented in the form of a permit or a licence (licences will not be issued for terms in excess of five years) and will include a clause requiring that the concessionaire will not restrict public access without the approval in writing of the conservator.
- (c) Concessions will include a clause restricting stock types and numbers as necessary for each area.
- (d) The department will monitor the grazing against the concession agreement.

# 2 Military Use

Under the Military Manoeuvres Act 1915 the Governor-General may proclaim land (including public conservation land) 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 March 1990) 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. Conditions also ensure compliance with the policies laid out in the Kaimanawa Forest Park and Tongariro National Park management plans.

Military training within the conservancy may 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 Publication which recognises notified wildlife sanctuaries and nature reserves. Prior consent must be obtained from the controlling authority if flying is proposed within restricted airspace.

Large-scale military exercises are inappropriate on public conservation land where significant infrastructure or off-track use by large numbers of people is required.

# **Objective**

• To allow military use of public conservation land in accordance with the 1990 Defence Training Agreement.

# Implementation

- (a) The department will work co-operatively with the New Zealand Defence Force to manage the effects, if any, of military exercises.
- (b) Requests for military use of public conservation land will be considered on their merits in accordance with the criteria in the agreement.
- (c) Conditions may be applied to avoid, minimise or reduce impacts on natural and historic values and on visitors.
- (d) Where public conservation lands 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.
- (e) Vehicle use off formed and maintained roads is prohibited.

## 3 Telecommunications Sites

The conservancy's major telecommunications site is on Mount Pihanga in Tongariro National Park. This site is licensed to Genesis Power Limited. A number of other concessionaires are co-located on the site. Approximately 20 other smaller sites receive or transmit radio signals; the majority of these are occupied by the Institute of Geological and Nuclear Sciences for volcanic and seismic monitoring purposes. A number of these are used by the department for monitoring purposes.

Telecommunications providers must occupy high points with maximum line of sight to the surrounding landscape. Many of the landscapes within the conservancy are significant in the national sense and a number of them are significant globally. There is ongoing pressure from the telecommunications market place to establish new sites here.

The department regards the presence of existing telecommunications facilities and the erection of new facilities as being essentially incompatible with the objectives set out in the Conservation, Reserves and National Parks acts. This said, the department recognises that as the manager of much of the mountainous country in the conservancy it is inherently a major player in the telecommunications industry. The department works closely with telecommunications providers in order to meet its own requirements and to reduce the effects of telecommunications facilities.

The department will work with telecommunication groups to ensure that opportunities for the development of facilities are maximised off conservation land as a priority to ensure the natural and historic values of public conservation land are maintained.

Non-commercial operators such as marine radio societies also place demands upon public conservation land. Allowance for the 'public good' of these operators' functions can be made in setting rentals for sites but not in approving their establishment.

# **Objectives**

- To grant telecommunication concessions only where they do not compromise natural or historic values or public use and they cannot be located off public conservation land.
- To actively faciliate the removal and/or consolidation of telecommunication facilities (as technology changes and opportunities arise) so as to reduce the net impact of this infrastructure.

- (a) The department will require co-location on existing telecommunication facilities.
- (b) New telecommunication facilities or upgrades of existing facilities on public conservation land will be allowed only where there are proven to be no alternative sites or systems available, natural and historic values will not be compromised or effects can be avoided or remedied, and where the department considers the visual impact to be acceptable.
- (c) Removal of redundant telecommunication facilities will be required.
- (d) Telecommunications sites will not be approved in pristine areas.

- (e) The cultural and spiritual values of a particular site will be taken into account when considering an application. Local iwi will be consulted about values as appropriate.
- (f) Public use of telecommunications sites will not be restricted unless a restriction is essential for safety and security.

### 4 Easements

An easement establishes a right to use land for a particular purpose. Purposes may include access to adjoining properties, water supply, sewerage, stormwater run-off, gas pipelines and transmission lines.

Easement proposals generally have no direct benefit to management; the primary value is to the applicant. Over time the department will encourage and advocate the removal of transmission lines crossing public conservation land and will continue to work with applicants to ensure easement opportunities are only offered where no other opportunities exist.

## **Objective**

• To grant easements only where they will not significantly compromise natural or historic values or public use and their purposes cannot reasonably be achieved by other means on private land.

- (a) All applications for easements which involve vegetation clearing, earthworks or the erection of any structure will require an environmental impact assessment which should clearly show that all alternatives have been investigated. Applications will only be approved if the department is satisfied that the report shows the application to be acceptable in terms of the above objective.
- (b) Minor maintenance and upgrading of existing transmission lines will be permitted. Consent will be required (with conditions) on every activity.
- (c) Where significant redevelopment or major maintenance is required the department will seek opportunities to remove infrastructure from public conservation land.

# 5 Private Baches, Buildings and Other Structures

In most cases there is no reason for private buildings to be situated on public conservation land. Exceptions exist in the case of inherited occupancies.

## **Objective**

 To allow private or exclusive use of public conservation land for buildings or structures only where existing and permitted and where natural and historic values are not compromised.

# Implementation

- (a) New buildings or structures which are intended solely for private or exclusive use will not be permitted. Existing permitted buildings or structures in this category will be managed to ensure that the above objective is met.
- (b) Any existing occupation rights which are inappropriate or redundant will be removed.
- (c) Buildings or structures which are required for recreation purposes or essential community facilities and which will not compromise natural and historic values may be permitted on public conservation land. No buildings or structures will be permitted where suitable alternative sites exist on private land. Cumulative effects will be considered.

# 6 Prospecting, Exploration and Mining

Mining is generally incompatible with the protection of natural and historic values.

In terms of the Crown Minerals Act 1991, the Minister of Conservation may refuse access for mining activities for land held or managed under the Conservation Act 1987 or any other act specified in the First Schedule to the Conservation Act 1987.

The access arrangements are agreed to and enforced under the provisions of the Crown Minerals Act 1991. There are no public input provisions.

Mining activity in the conservancy has historically been low and there has been little pressure for mining on public conservation land. There is an expired licence to mine sulphur within the Lake Rotokawa Conservation Area and there has been some interest in limestone extraction within the Tongariro Forest Conservation Area.

# **Objective**

To ensure that prospecting, exploration and mining do not adversely affect the protection of natural and historic values on public conservation land.

# Implementation

- Applications for access on to public conservation land for prospecting, (a) exploration and mining will not be approved if they threaten natural or historic values or restrict public use.
- (b) The department will advocate appropriate conditions on any resource consent related to any access arrangement for mineral-related activities.
- Clearance of relatively unmodified vegetation for access will only be (c) allowed if full restoration/rehabilitation can be assured so that there will be no net loss of natural and historic values.
- Compensation according to the degree of modification will be required to (d) ensure that there is no long-term net loss of natural and historic values (section 76 of the Crown Minerals Act applies).
- (e) Applicants for access arrangements must supply the department with the appropriate requirements of section 59 of the Crown Minerals Act 1991. The following matters are relevant to (but do not limit) any consideration of an application:
  - whether the restoration/rehabilitation proposed is adequate and can be achieved;
  - whether there is adequate financial protection by way of insurance or bond to ensure compliance with conditions and remedial action.

#### 7 **Power Generation**

Waterways and geothermal fields within the conservancy are already extensively developed for electric power generation. Past development has often involved the taking of public conservation land under the Public Works Act 1981, particularly in the case of the Tongariro Power Development where water intakes, hydro tunnels, outfalls and power stations are situated within or under the Tongariro National Park, Kaimanawa Forest Park and the Tongariro Forest Conservation Area.

Conservation managers have traditionally been guided by Government to allow power schemes which compromise natural and historic values but which fulfil energy needs for the public. With the privatisation of the principal power generating authority (Genesis, Mighty River and Contact) it is envisaged that the department will be able to consider applications to use public conservation land for power generation and make decisions based solely on conservation criteria.

The current legal situation with regard to hydroelectric power generation on public conservation land is as follows:

- power generation is incompatible with the purposes of the National Parks
   Act 1980 except to the extent that it may be allowed by an act of
   Parliament;
- unless the land is no longer required under legislation administered by the
  department and has no value for conservation purposes, the Minister of
  Conservation, according to current legal advice, cannot consider releasing
  the land for hydroelectricity purposes.

## **Objective**

 To assess all proposals for power generation facilities on public conservation land and not to permit any which threaten natural and historic values.

## **Implementation**

- (a) All applications to set land apart for power generation will be treated like any other disposal of public conservation land.
- (b) Applications which have a detrimental impact on public conservation land and cannot avoid, remedy or mitigate the effects will not be permitted.
- (c) Any public conservation land which is set aside for power generation must be leased at current market value.

# 8 Beekeeping

The unauthorised use of public conservation land for honey production is an ongoing problem in the conservancy. Most apiarists who deliver hives to the area seek the nectar from ling heather, an introduced plant pest which has colonised much of the north-western sector of Tongariro National Park and many other areas of public conservation land.

The introduction of bees into a national park is not permitted in terms of the National Parks Act 1980. In the past beekeepers have accessed the ling heather in Tongariro National Park by situating their hives on land which adjoins the

national park but which is administered under the Conservation Act 1987. The department is able to permit this under that act.

The department has the option of permitting beehives within any other public conservation land in the conservancy, but there is evidence to suggest that beekeeping activities compromise natural values, restrict public use and hinder management operations such as plant pest spraying.

## **Objective**

• To permit the siting of beehives on public conservation land only where natural values are not compromised and the presence of hives will not cause inconvenience to the public or departmental operations.

# Implementation

- (a) Beehives will not be permitted in Tongariro National Park.
- (b) The owners of unauthorised beehives on public conservation land will be identified and approached to licence or remove their hives as applicable in terms of the objectives.

### 9 Exotic Forests

Exotic forest species conifers are normally an unwanted species on public conservation land. Forest stands on public conservation land were inherited from former agencies. The conservancy has small areas of *Pinus radiata* in the Taupo Basin and extensive mixed conifer plantations within Plateau Forests. As part of those plantings a small block within the north-western boundary of Tongariro National Park was planted with exotics.

The department's long-term objective is to remove plantation forests where their removal does not cause significant environmental impact. Any revenue received will help enable removal and associated restoration to occur.

Once the trees are removed from a site invading plant pests such as gorse and regenerating pines may be a further problem. Part of the logging strategy must include follow-up management of the site to ensure that its conservation potential is maximised via a restoration/rehabilitation strategy.

Although the department has the option of replanting exotic production species on some classes of reserves this would rarely be justified when weighed against the benefits of encouraging the site to be restored to native vegetation.

# **Objectives**

- To remove or manage exotic forests so that they do not endanger the conservation of natural and historic values.
- To prioritise the removal of exotic forests in terms of the net gains to be made through restoration/rehabilitation of indigenous habitat.

# Implementation

- (a) An inventory of exotic timber stands will be developed to determine the benefits to be gained by restoring the indigenous habitat and the viability of removal.
- (b) Where exotic forests are removed, priority will be given to restoring native vegetation.
- (c) Priority will be given to restoring land managed by the department to indigenous vegetation rather than exotic production species.
- (d) Resource consents pursuant to the Resource Management Act 1991 will be sought as required for activities with potential adverse effects.

# 10 Sphagnum Moss

The conservancy has a few wetland sites where sphagnum moss is present. These are of high value for their relative rarity and the significant part the moss plays in wetland ecosystems. Sphagnum has significant commercial value but is not available in this conservancy in quantities that make taking it sustainable. Harvesting sphagnum here would lead to the degradation of wetland ecosystems and a significant loss of natural values.

# **Objective**

• To maintain viable ecosystem diversity in places where sphagnum moss is present.

# Implementation

(a) Applications to harvest sphagnum moss from public conservation land will be declined.

# 11 Advertising, Promotion and Filming

The natural resources of the conservancy are in demand for advertising, filming and promotional activities. Spectacular landscapes, unique sites and ease of access have meant a significant increase in requests for use.

The department is required to manage the physical and social effects of these activities. It must ensure the proposed use is consistent with the image and standing of a site, its resources and use. For example, advertisements which involve developing an appreciation of the landscape or products which are allied with the identified uses of that landscape may be acceptable, whereas advertisements for products such as four-wheel-drive vehicles, which are not permitted off formed and maintained roads, would be inappropriate.

The landscape and cultural values of the conservancy have been used in a number of feature films and documentary productions. The department has assisted with staff expertise where appropriate and will continue to do so where natural and historic values are promoted.

Natural hazards such as volcanic activity attract significant media coverage. The department is required to manage this coverage to avoid adverse effects on those resources commonly used by the public.

The department's corporate image and the images it is charged with protecting are often used to promote a product or service. That use must be undertaken with the express permission of the department as, in places, inappropriate links between products and natural and historic values have been made.

# **Objective**

 To ensure that advertising, promotional and filming activities on public conservation land are consistent with identified conservation values and policies.

- (a) The applicant must provide evidence that the proposal cannot be undertaken off public conservation land.
- (b) The activity proposed by the applicant must be consistent with the values for the conservation unit as identified in the conservation management strategy and any other plan for that unit.
- (c) Where pristine environments would be adversely affected by a proposed activity, the department will not grant a concession.
- (d) The applicant must not use the department's branding or suggest any endorsement by the department in any activity undertaken, without the express permission of the department.

- (e) The applicant's means of access in support of the proposed activity must be consistent with the vehicle and aircraft policies in this strategy.
- (f) The activity must not interfere with the use and enjoyment of the park by other visitors or deny public access opportunities.
- (g) Advertising hoardings or signs must be consistent with the department's guidelines.
- (h) Media working on public conservation land must conform with the above policies. Allowance will be made for the timeframes involved where issues such as volcanic hazards or human interest stories need to be covered with urgency.
- (i) The department will protect cultural values when considering a concession application for advertising or filming on public conservation land.
- (j) Promotional activities which are consistent with the purpose for which the land is held will be permitted.

# 12 Wild Animal Recovery Operations

The Wild Animal Control Amendment Act 1999 repealed the licensing provisions for aerial recovery under part II of the Wild Animal Control Act 1977. Helicopter operators wanting to carry out a wild animal recovery operation must obtain a concession to hunt on public conservation land, comply with Civil Aviation Authority requirements and comply with NZ Police requirements.

## **Objective**

- To grant wild animal recovery operation concessions where they assist in pest management.
- To approve helicopter-based animal control operations where there are clear benefits to pest management and impacts on visitor experience are minimised, or other pest management methods are not viable.

# Implementation

(a) Most areas of public conservation land will be available for wild animal recovery operations unless there are reasons for restriction of a particular area

# 3.9 Planning

# 3.9.1 Statutory Planning

### Introduction

One of the department's most important direct mechanisms for achieving protection of natural and historic values on land other than public conservation land is through the statutory planning procedures of the local authorities.

The Conservation Act 1987 enables the department to advocate the conservation of natural and historic values generally and to promote the benefits to present and future generations of the conservation of natural and historic values of New Zealand in particular.

The Resource Management Act 1991 sets out the planning and resource consent procedures for local government. The cornerstone of this act is the concept of sustainable management. The provisions and the policies and plans prepared by district and regional councils under the Resource Management Act 1991 apply to the department (and other Crown agencies) as much as they do to any other organisation or individual.

The department, and any other organisation or individual undertaking works or activities on public conservation land, must apply for any resource consents required by the Resource Management Act 1991 or the plans prepared under it. The act gives the Crown limited exemption from resource consents as required by territorial local authorities (district councils) but does not contain any exemption for works or activities of the Crown which require consent from regional councils.

Under the Resource Management Act 1991 local authorities must prepare regional policy statements and district plans. Other regional plans may be prepared to cover a range of issues such as waste or freshwater management. The Minister of Conservation must be consulted in the preparation of policy statements under this act.

Other legislation gives the department opportunity to advocate for protection of natural and historic values. Under the Local Government Act 1974 the department has an opportunity to comment on reorganisation plans for local and regional government and to comment on draft plans prepared by councils. The department also has a comment and/or approval role in relation to management plans prepared under the Reserves Act 1977 for reserves administered by local authorities.

All regional policy statements and regional and district plans must have regard to the Tongariro/Taupo Conservation Management Strategy.

Approximately 75% of the conservancy lies within Waikato Regional Council boundaries and the remainder within Manawatu-Wanganui and Hawkes Bay regional council boundaries. Taupo District Council takes in Taupo Basin, Kaimanawa-Moawhango and part of Tongariro-Ruapehu. At the southern limit this includes the flanks of the eastern side of Mount Ruapehu and the peak of Mount Tongariro.

Ruapehu District Council takes in the remainder of Tongariro-Ruapehu and the Plateau Forests (see *Local Authority Boundaries* map).

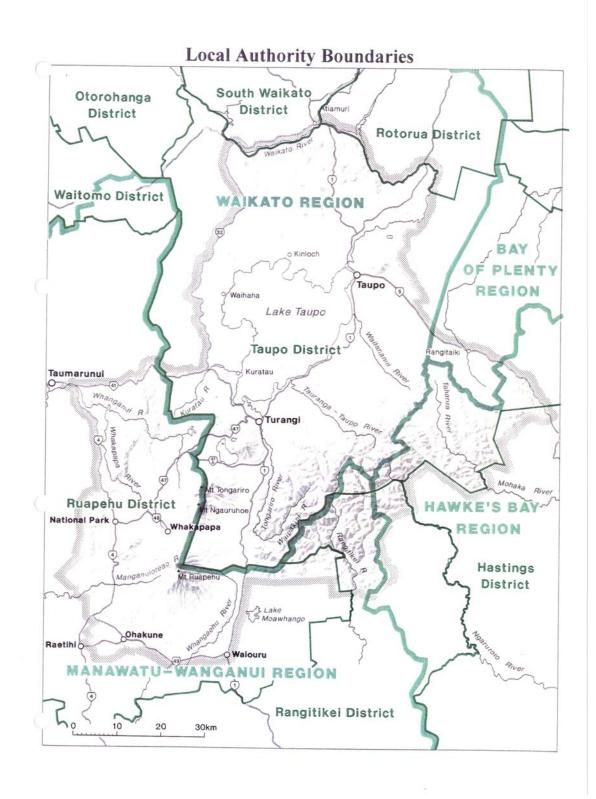
Taupo is the conservancy's largest urban centre, followed by Turangi. Other than Ohakune, which has a variable population based on winter skiing, the conservancy has six towns which serve the rural community or are holiday settlements.

Much of the conservancy is heavily modified, particularly Taupo Basin and Plateau Forests. The department places a high priority on advocacy for the protection of natural and historic values in these areas.

# **Objectives**

- To ensure that natural and historic values are fully considered by local authorities as they develop policy statements and plans and during resource consent procedures.
- To protect, through statutory processes and liaison with local authorities, iwi and other groups, all areas of high natural and historic value in the conservancy.

- (a) Close liaison will be maintained with local authorities preparing their policies and plans, on conservation issues generally and in consent applications under the Resource Management Act 1991.
- (b) The department will provide well-researched and accurate information about natural and historic values on a cost recovery, reciprocal or mutually beneficial basis.
- (c) All notified resource consent applications in the conservancy will be assessed for effects on natural and historic values. Guidelines will be developed, in association with local authorities, to ensure that appropriate proposed nonnotified resource consent applications are sent to the department for consideration.
- (d) Pre-hearing meetings will be sought wherever possible to resolve possible conflicts and to share information both before and after placing a submission.
- (e) The department will co-operate with other conservation interests whenever possible to achieve its objectives.
- (f) Whenever possible and appropriate the department will seek to negotiate acceptable outcomes.





# 3.9.2 Management Planning

Prior to 1990 separate management plans were required for all parks and reserves in the conservancy. Some reserves have approved management plans.

The Conservation Law Reform Act 1990 changed the requirements for management plans and established conservation management strategies (CMSs) to serve as the primary planning documents for all areas managed by the department and all of its functions. Separate conservation management plans (CMPs) may be necessary, however, for some areas in the conservancy.

The purpose of conservation management plans is to implement the conservation management strategy and establish detailed objectives for the integrated management of natural and historic resources within an area, and for recreation, tourism and other purposes.

A conservation management plan may relate to any area or areas managed by the department under the:

- Wildlife Act 1953;
- Marine Reserves Act 1971;
- Reserves Act 1977;
- Marine Mammals Protection Act 1978;
- Conservation Act 1987;
- National Parks Act 1980;
- Walkways Act 1990;
- Wild Animal Control Act 1977.

Under the Conservation Act 1987 conservation management plans shall be prepared if:

- their preparation is required by a conservation management strategy, section 17E(2);
- there is no operative conservation management strategy and the Minister of Conservation requires their preparation, section 17E(3).

Where there is an operative conservation management strategy but there is no provision in it for a particular conservation management plan, the operative conservation management strategy may be amended to provide for the conservation management plan.

National park management plans are compulsory under the National Parks Act 1980.

The sports fishery management plan is continually reviewed by the department. Although the sports fishery management plan is a statutory document prepared under the Conservation Act 1987 its only statutory connection to the conservation management strategy is that it must not derogate from it.

Besides the conservation management strategy, other types of non-statutory documents such as functional or operational plans may be prepared in the conservancy. These plans provide a greater level of detail than this strategy.

The links between statutory and non-statutory documents are shown in appendix 6.

# **Objective**

To ensure integrated management of all areas of the conservancy and integrated management between conservancies and, in accordance with statutory provisions, to provide for public involvement in management planning.

- (a) The conservation management strategy will be the basic planning document for the conservancy. Existing and subsequent conservation management plans must conform to the objectives and implementation provisions contained in the conservation management strategy.
- (b) The Tongariro National Park Management Plan will be maintained and reviewed as operative.
- (c) The Kaimanawa Forest Park Management Plan will be maintained and reviewed as operative.
- (d) Further conservation management plans will be prepared if one or both of the following factors apply to a specific area:
  - there are special issues which cannot be covered by the conservation management strategy in sufficient detail or cannot be resolved by consultation or other processes;
  - the area has a high profile or has particular significance to the community or sectors of the community.
- (e) A conservation management plan will be prepared, maintained and reviewed for Tongariro Forest once gazettal has been completed following resolution of outstanding Treaty of Waitangi issues.
- (f) The department will continue to collect and update resource information and other planning data relevant to management of natural and historic values in the conservancy on and off public conservation land.
- (g) Management planning information will be provided through newsletters, public meetings and regular liaison with groups and individuals.
- (h) Input will be specifically sought from key groups and individuals in the development of policies, plans and brochures.
- (i) The Tongariro/Taupo Conservation Board will continue to act as an important link between the department and the public in regard to consultation and sharing of information.

# 3.10 Areas Not Administered by the Department

As well as managing lands under its control, the department has a function under section 6 of the Conservation Act 1987 to advocate and promote the conservation of natural and historic resources generally and to protect freshwater fisheries and freshwater fish habitats. It also has responsibility under other acts to protect natural and historic values.

Protection of natural values in areas not administered by the department does not necessarily require the acquisition of land. It may be achieved by leases or covenants or simply through increased public awareness and understanding of conservation issues. Community involvement in conservation and in land protection is essential.

The long-term protection of the indigenous species of the conservancy will require that all managers of public and private land see the sensitive accommodation of indigenous habitat as an integral part of their land use activities.

# 3.10.1 Natural Areas

The areas of high natural value not administered by the department in the conservancy are identified in part II of this document. The department has available to it a number of mechanisms for achieving the protection of these areas including:

- conservation covenants under section 27 of the Conservation Act 1987 and section 77 of the Reserves Act 1977;
- protected private land agreements under section 76 of the Reserves Act 1977;
- Nga Whenua Rahui kawenata under section 27A of the Conservation Act 1987 and section 77A of the Reserves Act 1977;
- management agreements under section 29 of the Conservation Act 1987 and section 38 of the Reserves Act 1977;
- long-term leases of private land;
- appropriate rules and policies contained within plans produced by local authorities under the Resource Management Act 1991;
- advocacy of high indigenous natural and historic values to private landowners;
- outright acquisition of private land by way of purchase, acceptance of gift or exchange.

Most of these mechanisms require financial commitment to implement protection. Even in cases where purchase or lease costs are not involved a contribution for legal, fencing and survey costs will usually be required. Given limited resources the department will need to be selective about the protection proposals it chooses to pursue. The department retains a strong advocacy component in its work, funded through the annual business plan.

The conservancy's priorities for protection will generally be established among those areas identified in part II of this document but flexibility to be responsive to offers or proposals from the owners of other areas must be retained.

Funds are available upon application, on a case by case basis, from a variety of national and external sources. These are the Land Acquisition Fund, the Forest Heritage Fund and Nga Whenua Rahui. Each of these funds has its own set of application procedures.

# **Objectives**

- To protect, facilitate and advocate protection wherever possible of unique, representative or threatened natural values on private land.
- To raise public awareness of natural values on private land.

- (a) Priorities for protection of private land will be established on an annual basis as part of the business planning process.
- (b) Forms of protection which are entirely voluntary and which do not require financial consideration, such as giftings, covenants and agreements, will be favoured over transactions such as purchase and leasing.
- (c) Perpetual covenants under section 27 of the Conservation Act 1987 and section 77 of the Reserves Act 1977 will be preferred over covenants with a finite term. Nga Whenua Rahui kawenata may contain provisions for limited terms and review.
- (d) Funding for the protection of forest ecosystems of high natural value will be sought from the Nature Heritage Fund.
- (e) Funding for the protection of natural resources of high value on Maori land will be sought, in conjunction with Maori owners and trustees, from Nga Whenua Rahui.
- (f) Funding for the protection of non-forest ecosystems on other land will be sought from the Land Acquisition Fund or other sources if available.
- (g) The department will seek appropriate rules in local authority plans and policies to protect natural values on private land.

# 3.10.2 Historic Resources

Under the Conservation Act 1987 the department has responsibilities, in association with tangata whenua and the Historic Places Trust, for advocating the conservation of historic resources generally. The *Historic Resources* map shows the distribution of known historic resources within the conservancy.

Pre-European settlement is a major feature of the conservancy due to the abundance of resources at Lake Taupo. The shore of the lake was a desirable place to settle relative to the generally inhospitable landscape of the central plateau.

The conservancy does not have a strong Historic Places Trust presence. There is no regional officer, no district committee, and there are few registered historic places. The few museums and historical societies face a difficult task through lack of resources and expertise. The department may at times become involved in projects on contract because of this situation.

Little recent archaeological research has been undertaken in the conservancy. Knowledge of the area comes from site reports, investigations and records in the New Zealand Archaeological Association Site Record File, and from traditional history. The department requires a greater knowledge of the resource: continuing land development may threaten important sites.

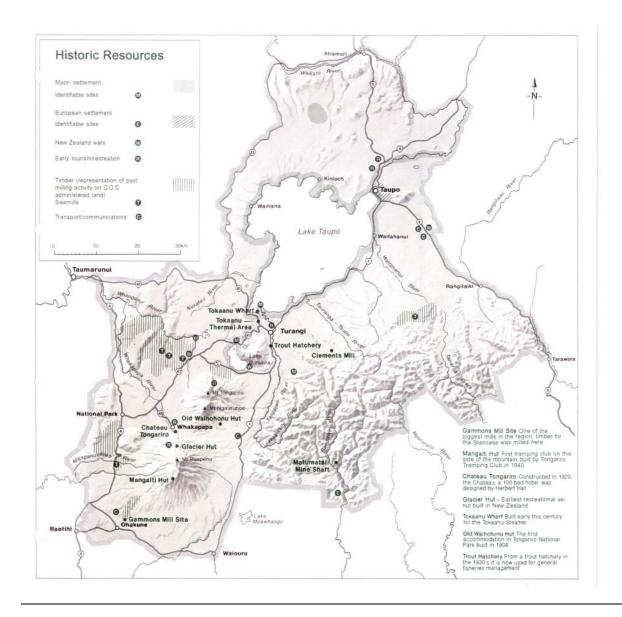
The department is involved with the local Heritage Trails Committee and its national foundation to promote heritage within the conservancy.

# **Objectives**

- To advocate protection of historic sites on private land in order to ensure their long-term preservation.
- To raise public awareness of historic heritage and encourage support for its conservation.

- (a) The Tongariro/Taupo Conservancy Historic Resources Strategy will guide the department in management of historic sties.
- (b) The department will support tangata whenua to achieve the preservation of sites of cultural significance.
- (c) The department will work closely with historical societies and community groups in order to achieve the protection of historic resources.
- (d) In liaison with tangata whenua and the New Zealand Historic Places Trust, the department may undertake, co-ordinate or co-operate in further surveys and research into specific sites and areas that are not located on public conservation land.

- (e) The department may facilitate the identification of historic places of special significance on land not administered by the department or otherwise managed for protection purposes and may initiate their protection by acquisition, covenanting, or other means.
- (f) A working relationship will be developed and maintained with local authorities to ensure that historic values are fully considered in all statutory processes.
- (g) Protection mechanisms such as covenants will be used to achieve protection and conservation of sites of regional and national significance.
- (h) Representative physical examples of the history of Tongariro/Taupo will be targeted for protection.
- (i) The department will maintain an involvement in the Heritage Trails Committee to facilitate increased public understanding of heritage issues within the district.





## Part IV

# Conservancy Resources



## 4.1 Description of Public Conservation Land

#### 4.1.1 Introduction

Public conservation land units are shown on a series of maps. Each site has a land register number (e.g., 60096). This number corresponds to the information sheets in 4.7. The sheets are numerically ordered using the same land register numbering. The top right hand corner of each information sheet has a map reference which allows for location of a site on the appropriate map.

The descriptive information for each survey sheet is not intended to be exhaustive but should provide an introduction to the site and indicate targeted management objectives. Where information is incomplete, the department will continue to undertake survey work and add to the record sheets.

The following records no longer exist due to site transfers, vesting or amalgamation with other records: 60031, 60041; 60043; 60110; 60115; 60119, 60131. Land unit 60051/10 has been deleted because it is private land and the lease under which it was held has expired.

The following land units have been returned to Ngati Turangitukua Charitable Trust as a result of the Deed of Settlement dated 26 September 1998. These lands are private property and no longer administered by the Crown: 60091; 60112, 60113; 60120; 60174.

On the inventory sheets the field 'Fauna' often uses the phrase 'most common forest birds'. This description includes: bellbird, blackbird, chaffinch, fantail, grey warbler, kingfisher, morepork, silvereye, tomtit, tui and whitehead.

## 4.1.2 Methodology for Site Values in Land Inventory

#### (a) Recreation Values

Individual site scores are based on visitor numbers, visitor composition, future use numbers, recreation facilities, significance to the visitor of natural and historic features and the degree to which the site deepens visitor appreciation of conservation. These criteria are taken from the department's Quality Conservation Management framework.

Category 1 Score 16 and over

Category 2 Score 6 to 15

Category 3 Score 1 to 5

#### (b) Historic Values

Individual sites are assessed according to their social, historical, traditional, cultural, archaeological, technological, aesthetic, architectural and rarity values. Assessment is guided by the Cultural Landscape Planning Manual prepared by the Historic Places Trust.

Category 1 Sites that are of special or outstanding historical or

cultural heritage significance or values and/or those

which require ongoing management.

Category 2 Sites in a state of suspension and/or for which protection

is desirable and/or with potential for culture study and

protection.

Category 3 Sites of no value or requiring no further attention.

#### (c) Conservation Values

Individual sites are assessed according to criteria which include the number of high priority species that they support, their special and unusual ecosystems and the intactness of those ecosystems, and their geographical characteristics.

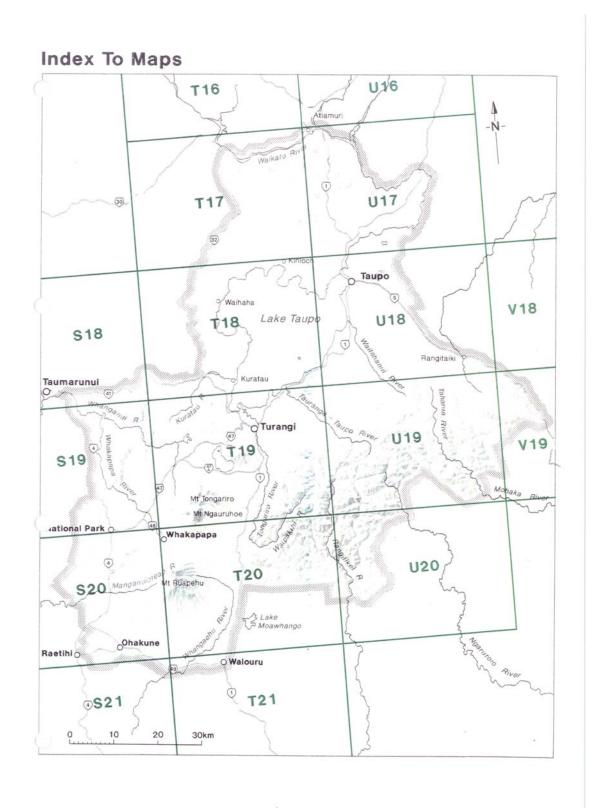
Category 1 Sites of high to outstanding conservation importance.

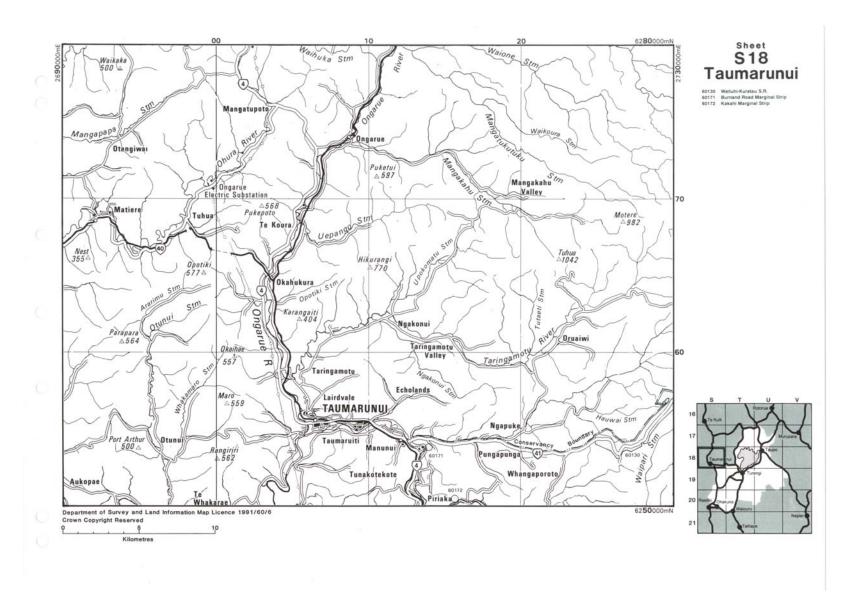
Category 2 Sites worthy of attention and protection.

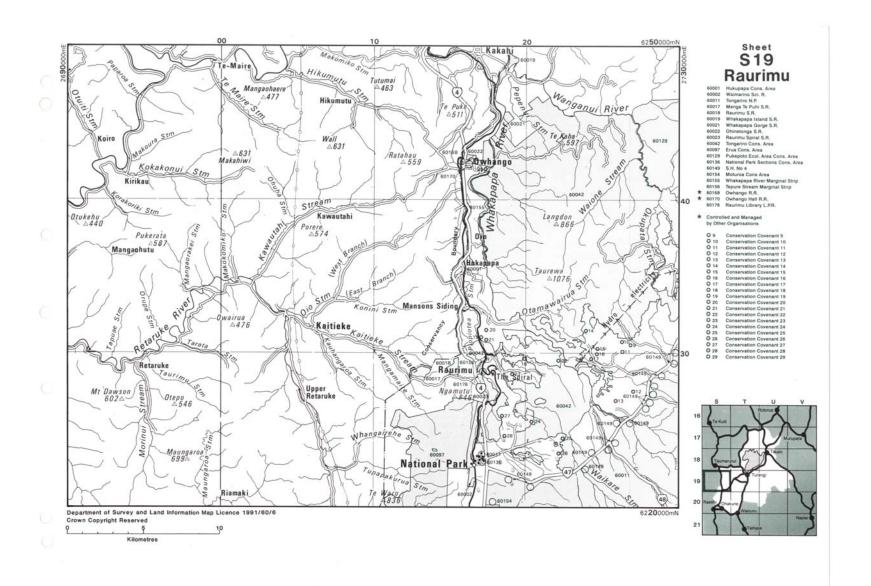
Category 3 Sites with little or no conservation value.

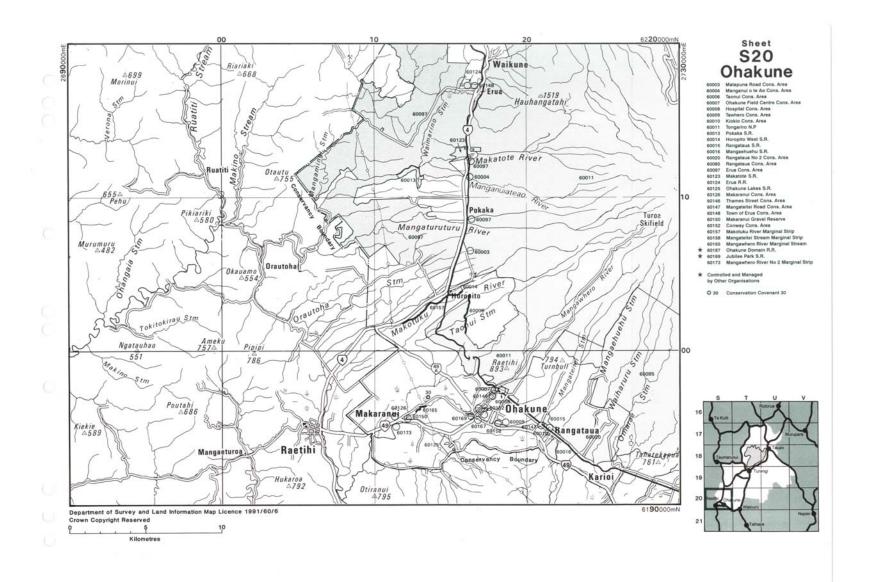
## 4.1.3 Maps

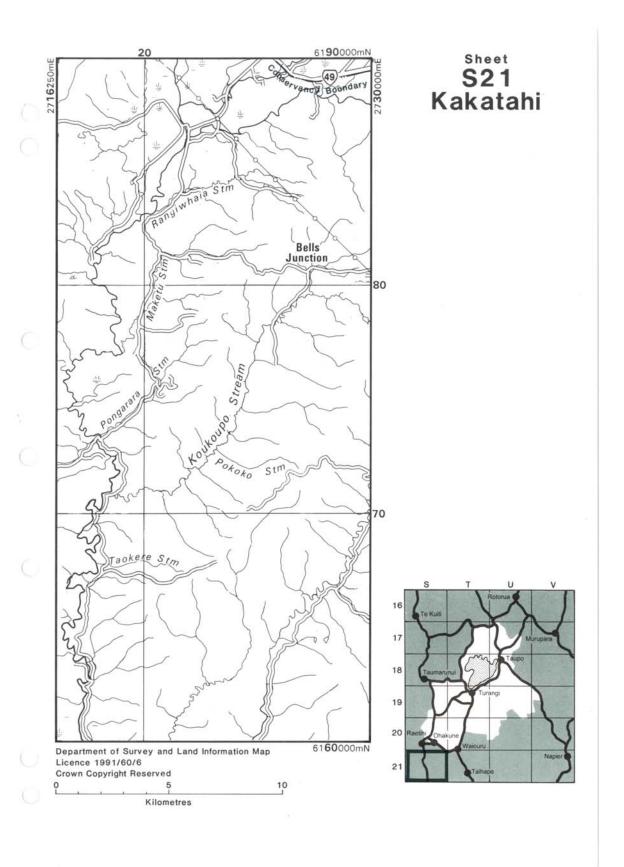
- Map Index Sheet
- S 18 Taumarunui
- S 19 Raurimu
- S 20 Ohakune
- S 21 Kakatahi
- T 17 Whakamaru
- T 18 Kuratau
- T 19 Tongariro
- T 20 Ruapehu
- T 21 Taihape
- U 17 Wairakei
- U 18 Taupo
- U 19 Kaimanawa
- U 20 Kaweka
- V 19 Te Haroto

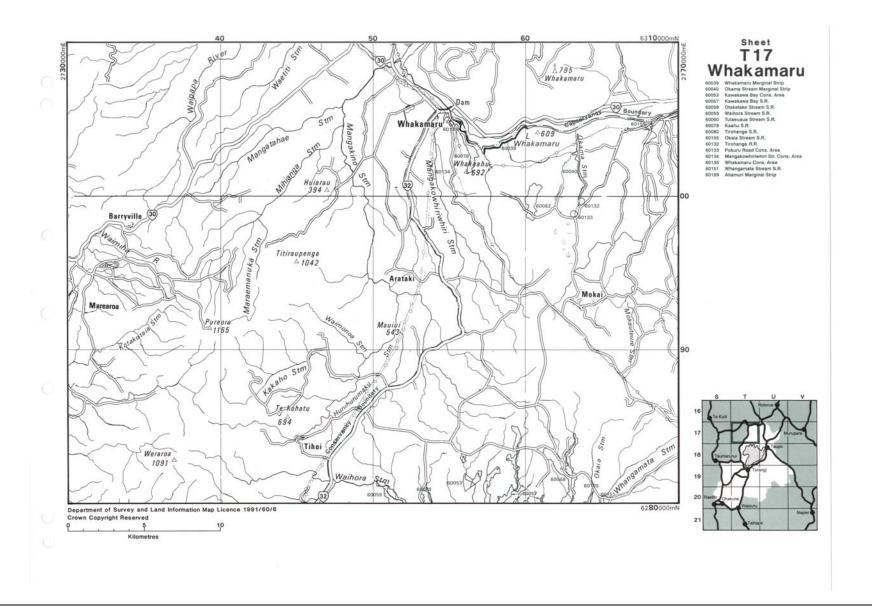


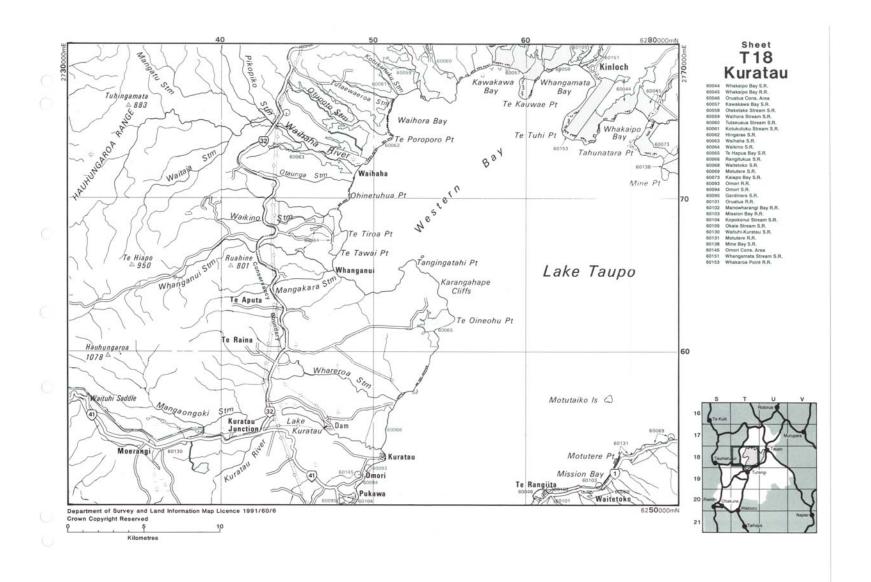


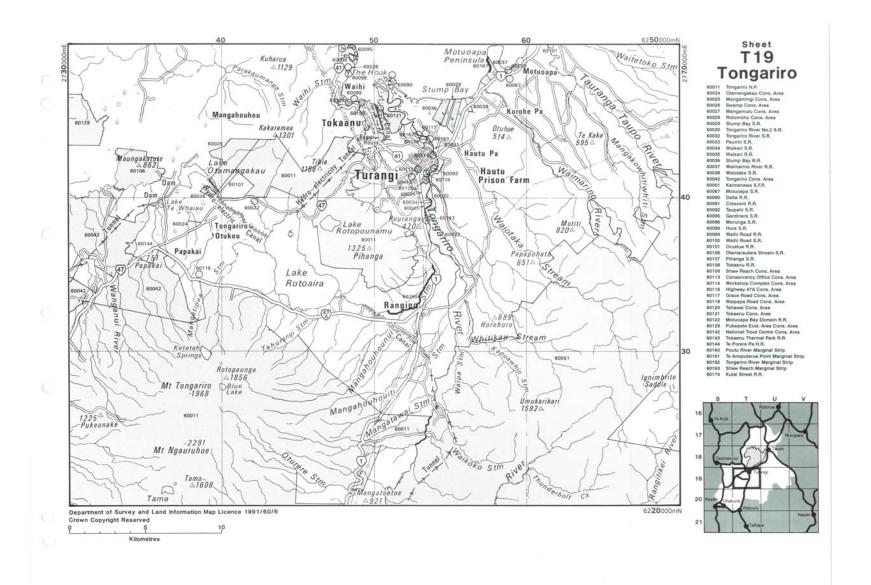


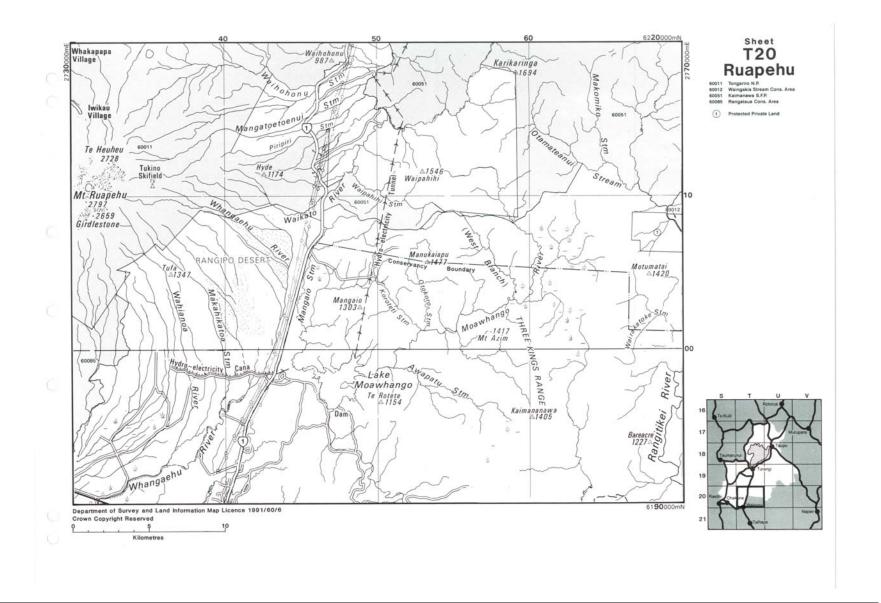


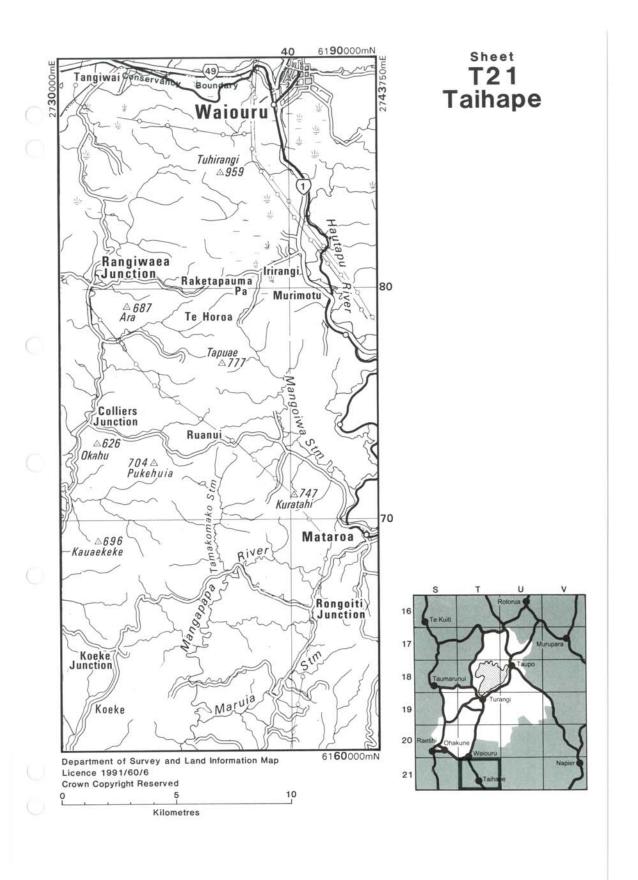


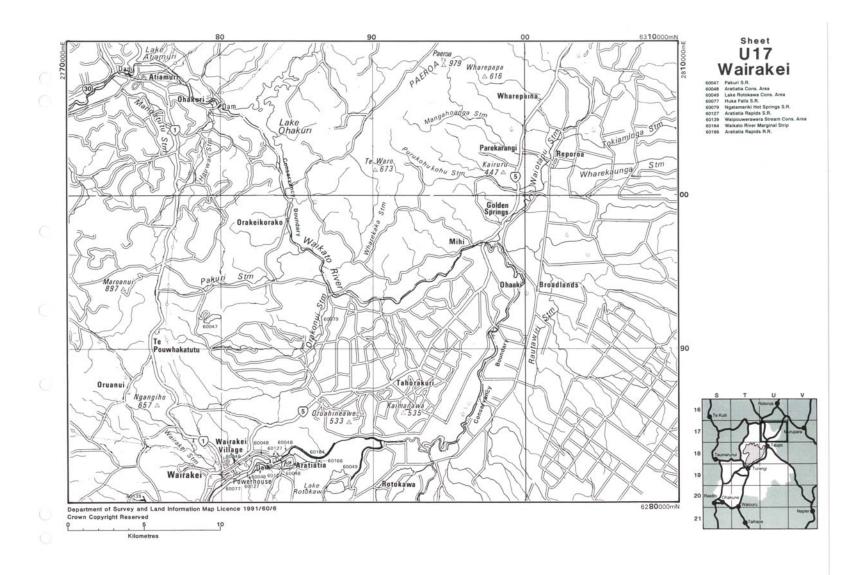


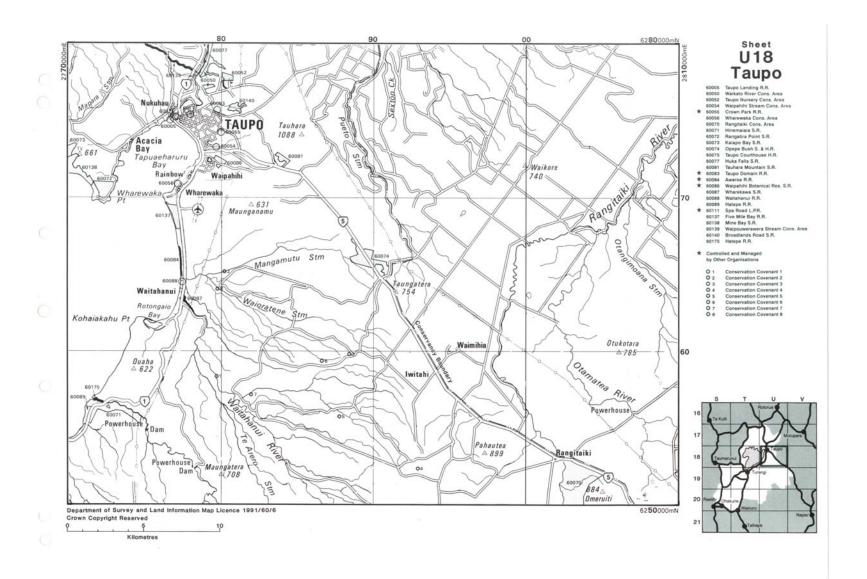


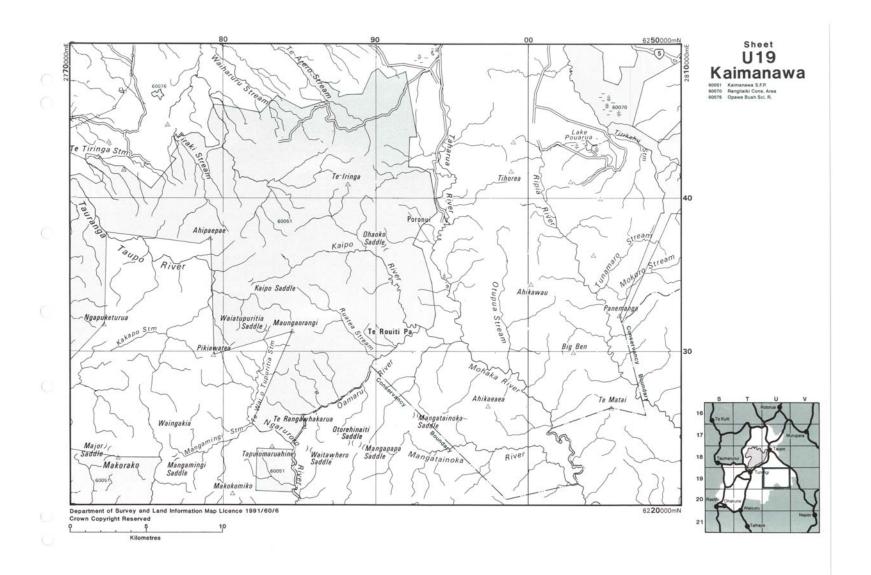


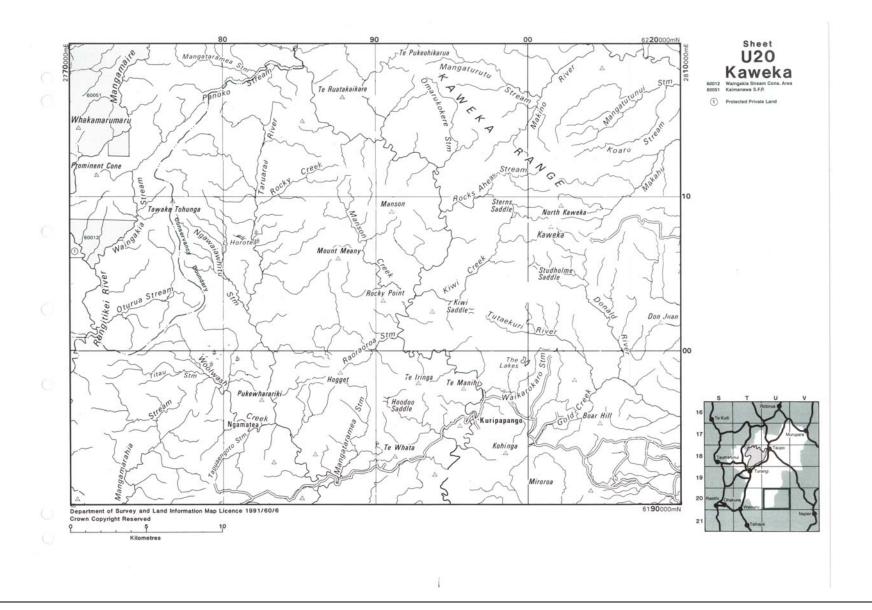


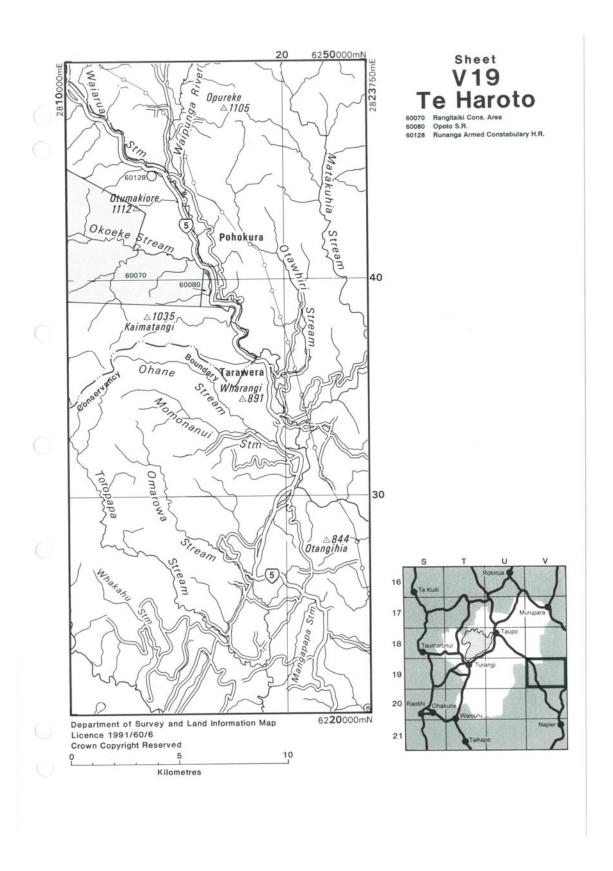












## 4.2 Place - Tongariro/Taupo Conservancy

#### 4.2.1 Introduction

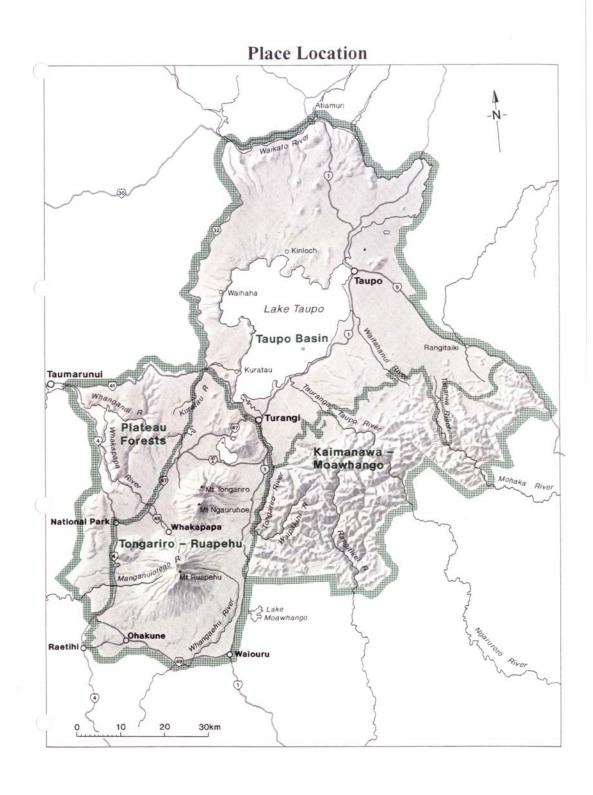
Tongariro/Taupo Conservancy covers 780,000 hectares, of which approximately 217,000 hectares are public conservation lands.

The conservancy is physically and ecologically diverse. The following resource information provides for four sub-regions with management objectives that vary. The 'places' recognised for their discrete character are Taupo Basin, Kaimanawa-Moawhango, Tongariro-Ruapehu and Plateau Forests (see *Place Location* map).

Within this conservancy the Tuwharetoa, Ngati Rangi and Ngati Tahu people are the tangata whenua. The Tuwharetoa extend from the north-eastern end of the conservancy through to National Park and the summits of the mountains. Ngati Rangi cover the west and south of the conservancy and Ngati Tahu the north-east.

The peaks of the mountains are tapu for tangata whenua. The waters of the conservancy have spiritual value to iwi. Lake Taupo belongs to the Tuwharetoa people and the headwaters of the Whanganui River are the domain of the Whanganui people.







## 4.3 Place – Taupo Basin

#### 4.3.1 Introduction

Taupo Basin is the largest place within the conservancy. Within it, 102 sites are managed by the department (see *Taupo Basin* map). The majority of sites have scenic or recreation reserve status. The remaining sites are conservation, Government purpose or marginal strips which lie alongside the banks of lakes, rivers and streams.

There are no statutory management plans for sites within Taupo Basin at present but the Lake Taupo Conservation Strategy which the department produced in 1990 is a widely used management reference. The Taupo Sport Fishery Management Plan is largely focused on this place.

The Tongariro/Taupo Conservation Board has endorsed the department's approach to the goal of integrated management of lakeshore reserves regardless of land tenure or status. This requires the active involvement and input of a large number of agencies and landowners.

### 4.3.2 Physical Description

#### (a) Topography and Geology

The Taupo Basin surrounds Lake Taupo and extends north to Atiamuri on the Waikato River and east to include the Rangitaiki Conservation Area. Altitudes range from 200 to 1,088 metres but are generally between 300 to 600 metres.

Lake Taupo occupies a huge subsided area (caldera complex) formed during catastrophic volcanic eruptions. Cliffs up to 360 metres high remained exposed after these collapses, forming the western and northern sides of the lake. Terraces marking earlier lake levels are prominent in places.

The other major landforms are the gently sloping landscapes of rhyolitic ignimbrite and pumice alluvium formed during and after eruptions from Taupo and northern volcanic centres between 1.3 million and 1,800 years ago. These landscapes are broken by rivers producing valleys and cliffs and by small volcanic cones of andesite, dacite, and basalt. The Tongariro River delta is a notable feature signifying the slow infilling of the lake along its southern and eastern shoreline. Greywacke ranges to the west and east and andesite volcanoes to the south surround this place. Yellow-brown soils have developed on Taupo pumice over most of the area. The andesitic ash component increases to the south. Pockets of organic loams also exist.

Geothermal areas are a significant feature of this place. There are at least ten geothermal systems, four of which lie across the boundary with Bay of Plenty Conservancy. Seven have been heavily influenced by human activity. Prior to geothermal development in the area, the Wairakei valley had the largest geysers in New Zealand. While the site remains significant, its degradation demonstrates the need to advocate for the protection of geothermal areas regionally.

#### (b) Climate

The Taupo Basin lies mainly in the northern cool temperate zone experiencing the warmest summers in the conservancy. The growing season is not long with frosts in December and March every other year on average. Winters are cool with snow falling to the lake level most years but seldom settling there. The Rangitaiki Plains, and in particular the frostflats, are colder and experience heavy frosts.

The annual rainfall of 1,000-1,600 millimetres, the least in the conservancy, is fairly evenly spread throughout the year. Winter is the wettest season and summer the driest but also the most variable. The prevailing winds are from the west and south-west.

#### (c) Vegetation

The Taupo Basin contains parts of three ecological districts - Atiamuri, Taupo and Kaiangaroa. Prior to human settlement the northern, southern and western sectors - the parts included in the Atiamuri and Taupo ecological districts - were almost entirely forested apart from thermal areas and wetlands. The eastern part of the Taupo Basin, in the Kaiangaroa Ecological District, has extensive frost flat shrubland.

The vegetation cover has undergone intensive modification with most areas being logged and/or burnt for cultivation. A few podocarp forest remnants survived logging or were only partially logged, leaving sufficient habitat for recovery. To the north there are some remnants of heavily logged tawapodocarp forest, a type which is now uncommon in Atiamuri Ecological District. Broad expanses around Lake Taupo and on Mount Tauhara are now covered in relatively young regenerating broadleaved species, manuka-kanuka forest or bracken fernland. River terraces support kowhai-kanuka forest with podocarp regeneration.

A large part of the frostflat heathland at Rangitaiki still survives. Over the years it has been subject to both natural and, more recently, human-induced fires.

Taupo Basin supports a number of wetlands. Around Lake Taupo there are flax-cabbage tree-toetoe swamps along streambeds. Larger wetlands, particularly those on the Tongariro River delta, are a complex mosaic of swamp and bog vegetation types. An extensive peat bog occurs in the centre of the remaining area of frostflat at Rangitaiki.

Although most thermal areas have been affected by development, thermal features and vegetation are still present, particularly at Wairakei (Alum Lakes and Craters of the Moon) and Tokaanu/Waihi thermal areas.

#### (d) Native Fauna

The habitat for many species of indigenous wildlife have been greatly reduced because the original vegetative cover has been removed or greatly modified over much of the Taupo Basin. The more common and adaptable species have survived well in forest remnants and in the more extensive regenerating forests around the lake but most of the species with special habitat requirements have disappeared, such as kokako, kaka and kiwi. The exceptions are wetland species, many of which thrive in Lake Taupo's wetlands and are relatively rare. Motutaiko Island, due to its isolation, also offers opportunity for the survival of very special wildlife.

#### (e) Animal Pests

A range of introduced mammals occurs in the Taupo Basin. Wild pigs occupy the second growth vegetation around the lake and are common within the basin's pine plantations. Densities are generally low as a result of intense hunting pressure.

Red deer occur in almost all forested areas although numbers are again kept low by recreational hunting pressure.

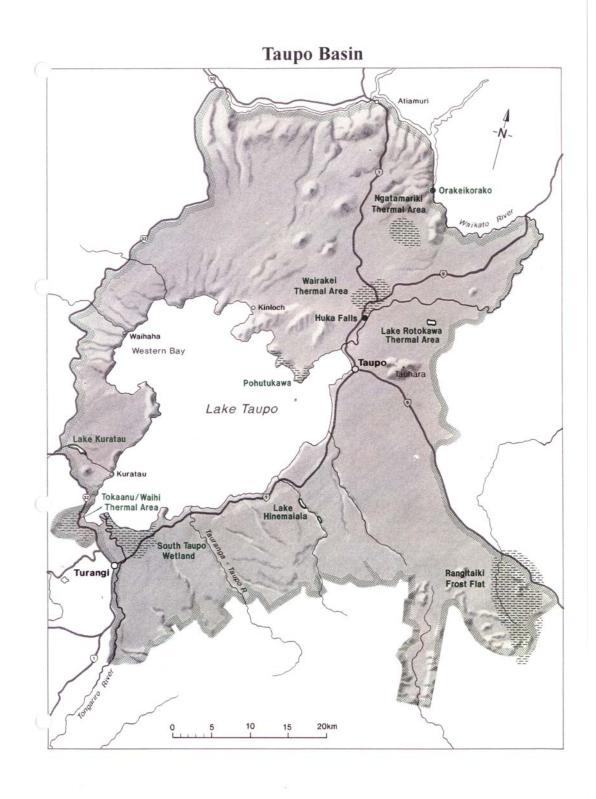
Sika deer are common in the pine and native forest associations on the southern and eastern shores of the lake but pastoral and urban development have restricted their range expansion to the north and west.

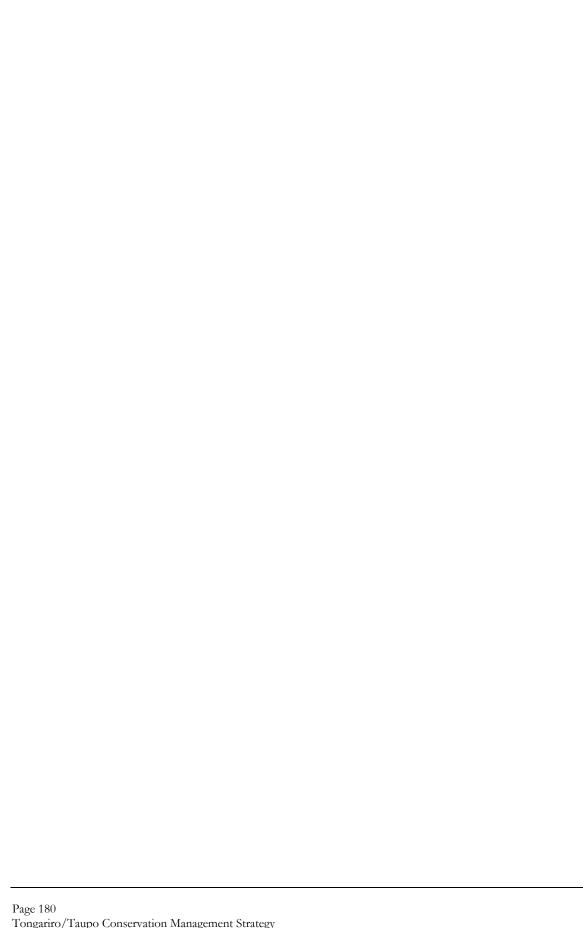
Goats have established in isolated pockets as a result of escapes from farms but control operations have kept their numbers and impacts low.

Possums occur throughout this place, often in high density as second growth native forest provides ideal habitat.

Rats, cats, mustelids, mice, hedgehogs and wasps are also widespread. Hares and rabbits tend to prefer pasture or pine forest habitats over native habitats in the Taupo Basin.







## 4.3.3 History

Many parts of the land and water of the Taupo Basin are regarded as ancestral heritage, taonga to Maori.

The Lake Taupo area was first settled by Maori around 800 years ago and despite the fact that terrestrial and aquatic resources were not plentiful relative to coastal areas, the early Taupo Maori successfully adapted to their environment. Koaro, toetoe, koura and kakahi from the lake and its tributaries, hunted birds from the forests and many edible plants and roots were used for food. Over the centuries various tribal and subtribal groups established around the lake but by the mid-eighteenth century the area was dominated, as it is today, by Ngati Tuwharetoa, established principally at the southern end of the lake. The Maori population was never very great and by the time of European contact (1830s) numbered between 1,100 and 5,000 people scattered in small settlements at strategic points around the lakeshore or inland on main access routes.

The Taupo Basin was regarded by early Europeans as a place to visit rather than as somewhere to settle. After the turn of the century Taupo gained increasing recognition as a trout fishing mecca. Indigenous forest milling became a major industry, concentrated on some of New Zealand's densest podocarp-dominant forests located north of Lake Taupo. It was the 1930s, however, when the area really began to grow as land was developed for farming and extensive pine forests were planted. There was a boom in the urban population of Taupo from the 1950s onwards. At the southern end of the lake the Tongariro power project in the 1960s led to similar growth in the Turangi-Tokaanu area.

## 4.3.4 Public Conservation Land

There are some 9,541.9812 hectares of reserves and conservation areas in Taupo Basin.

Number		Area (hectares)
60005	Taupo Landing Recreation Reserve	2.7455
60028	Rotomoho Stream Conservation Area	
60029	Stump Bay Conservation Area	
60030	Tongariro River No. 2 Scenic Reserve	
60032	Tongariro River Scenic Reserve	
60033	Paurini Scenic Reserve	
60034	Waikari Scenic Reserve	
60035	Waikari Recreation Reserve	
60036	Stump Bay Recreation Reserve	
60037	Waimarino River Recreation Reserve	
60038	Waiotaka Scenic Reserve	
60039	Whakamaru Marginal Strip	
60040	Okama Stream Marginal Strip	
60044	Whakaipo Bay Scenic Reserve	
60045	Whakaipo Bay Recreation Reserve	
60046	Oruatua Conservation Area	
60047	Pakuri Scenic Reserve	
60048	Aratiatia Conservation Area	
60049	Lake Rotokawa Conservation Area	
60050	Waikato River Conservation Area	
60052	Taupo Nursery Conservation Area	
60053	Kawakawa Bay Conservation Area	
60054	Waipahihi Stream Conservation Area	
60055	Crown Park Recreation Reserve	
60056	Wharewaka Conservation Area	
60057	Kawakawa Bay Scenic Reserve	
60058	Otaketake Stream Scenic Reserve	
60059	Waihora Stream Scenic Reserve	
60060	Tutaeuaua Scenic Reserve	
60061	Kotukutuku Stream Scenic Reserve	
60062	Hingarae Scenic Reserve	
60063	Waihaha Scenic Reserve	
60064	Waikino Scenic Reserve	461.1861
60065	Te Hapua Bay Scenic Reserve	
60066	Rangitukua Scenic Reserve	
60067	Motuoapa Scenic Reserve	
60068	Waitetoko Scenic Reserve	
60069	Motutere Scenic Reserve	
60071	Hinemaiaia Scenic Reserve	
	2	(continued)

Land Inventory Number	Name	Area (hectares)
(0072	Decretical Deight Coopie Decrete (Installative	112 1700
60072	Rangatira Point Scenic Reserve (leasehold)	
60073	Kaiapo Bay Scenic Reserve	
60074	Opepe Bush Scenic and Historic Reserve	
60075	Taupo Courthouse Historic Reserve	
60076	Opawa Bush Scientific Reserve	
60077	Huka Falls Scenic Reserve	
60078	Kaahu Scenic Reserve	
60079	Ngatamariki Hot Springs Scenic Reserve	
60081	Tauhara Mountain Scenic Reserve	
60082	Tirohanga Scenic Reserve	
60083	Taupo Domain Recreation Reserve	
60084	Awaroa Recreation Reserve	
60086	Waipahihi Botanical Gardens Scenic Reserve	
60087	Wharekawa Scenic Reserve	
60088	Waitahanui Recreation Reserve	0.3945
60089	Hatepe Recreation Reserve	19.697
60090	Delta Recreation Reserve	29.1064
60092	Taupahi Scenic Reserve	4.8435
60093	Omori Recreation Reserve	0.4457
60094	Omori Scenic Reserve	30.2809
60095	Gardiners Scenic Reserve	12.4326
60096	Morunga Scenic Reserve	25.4028
60098	Hura Scenic Reserve	4.0220
60099	Waihi Road Recreation Reserve	2.0400
60100	Waihi Scenic Reserve	11.9908
60101	Oruatua Recreation Reserve	33.1615
60102	Manowhararangi Bay Recreation Reserve	1.8294
60103	Mission Bay Recreation Reserve	
60104	Kopokonui Stream Scenic Reserve	
60105	Okaia Stream Scenic Reserve	
60108	Tokaanu Stream Recreation Reserve	
60109	Shaw Reach Conservation Area	
60111	Spa Road Local Purpose Reserve	
60114	Turangi Workshop Conservation Area	
60117	Graces Road Conservation Area	
60118	Waipapa Road Conservation Area	
60121	Tokaanu Conservation Area	
60121	Motuoapa Bay Recreation Reserve	
60127	Aratiatia Rapids Scenic Reserve	
60128		
60132	Runanga Armed Constabulary Historic Reserve	
	Tirohanga Recreation Reserve	
60133	Pokuru Road Conservation Area	
60134	Mangakowhiriwhiri Stream Conservation Area	(continued)

Land Inventory Number	Name	Area (hectares)	
60135	Whakamaru Conservation Area	20.0140	
60137	Five Mile Bay Recreation Reserve	55.6460	
60138	Mine Bay Scenic Reserve (leasehold)	173.2000	
60139	Waipouwerawera Stream Conservation Area	28.2843	
60140	Broadlands Road Scenic Reserve	39.6220	
60141	Huka Falls (Left Bank)	38.0092	
60142	National Trout Centre	18.0592	
60143	Tokaanu Thermal Park and Maunganamu Recreation		
	Reserve	47.4695	
60145	Omori Conservation Area		
60151	Whangamata Stream Scenic Reserve	30.6220	
60153	Whakaroa Point Recreation Reserve		
60159	Atiamuri Marginal Strip	0.2000	
60161	Te Anoputarua Point Marginal Strip	3.1363	
60162	Tongariro River Marginal Strip	2.4000	
60163	Shaw Reach Marginal Strip	1.5000	
60164	Waikato River Marginal Strip	20.7900	
60166	Aratiatia Rapids Recreation Reserve	53.8400	
60177	Tawera Street Gravel Reserve	0.2024	
60180	Waitahanui River Mouth Conservation Area	7.576	

#### Covenants

There are six conservation covenants in Taupo Basin:

Covenant 1	Waitahanui River	Waimihia Forest
Covenant 2	Mangamutu Stream	Waimihia Forest
Covenant 3	Ruahakune Bush	Waimihia Forest
Covenant 4	Wairango Lookout Hill Bush	Waimihia Forest
Covenant 5	Pukerimu Bush	Waimihia Forest
Covenant 6	Rotoakui Bush	Waimihia Forest

#### **4.3.5** Values

#### (a) Physical Landscape

The landscape of the Taupo Basin is the outcome of a million years of volcanic activity together with processes of rifting and subsidence.

The most devastating post-glacial event in the Tongariro/Taupo area was the great Taupo eruption about 1,800 years ago. Rhyolitic pumice (50 metres deep in places around Lake Taupo) covered nearly one-third of the North Island. Much has been eroded from steeper areas. Pumice deposits are also found in the Kaimanawa Ranges with shallow layers on the ridges and very thick ones in the valley bottoms.

Even though the landscape has been repeatedly covered by volcanic deposits, earlier landforms were not always buried. Ignimbrite and ash flowed and settled around the high peaks and ranges. The result is a diverse landscape of cliffs, caves, calderas, canyons, domes and fault scarp. Geothermal activity surfaces at Taupo and Tokaanu.

Vegetation in the basin has been greatly modified by natural forces and by man. Where natural associations have survived they are often out of equilibrium, moving through a perhaps temporarily stalled and seral phase of community development. Almost all of the vegetation around the Taupo Basin was demolished by hot pyroclastic flows. Only vegetation on a few leeward slopes survived the region's active volcanism.

The lake is far from being a static force. Its influence on the landscape is strong and variable as its moods change with weather and wind patterns, with time of day and with season.

#### (b) Geopreservation

Over 120 sites in Taupo Basin have been classified to date, representing twothirds of all geopreservation sites classified in the conservancy. The quantity is due mainly to features, exposures and eruption sequences produced 1,800 years ago by the Taupo eruption, the largest, best preserved, and probably most understood catastrophic eruption anywhere in the world for the last 7,000 years.

Twenty-two of the sites are classed as internationally important but only three of these (two very large blocks of Taupo pumice and the Wairakei geothermal field) are regarded as vulnerable to damage from humans. An additional forty sites are classed as nationally important but only seven are regarded as vulnerable to human activities. These include the Orakeikorako and Ouaha hills, gullies and rills in private ownership. Tokaanu/Waihi/Hipaua geothermal areas, Huka Falls, Aratiatia Rapids and Tongariro River delta span public conservation land and that of neighbouring private landowners.

#### (c) Flora

Plants considered priority species for protection in Taupo Basin (see appendix 4) are:

- Dactylanthus taylori vulnerable root parasite under threat from possums and collectors hosts are secondary forest broadleaved species;
- Christella 'cf dentata: thermal', rare thermal fern;
- *Cyclosorus interruptus* rare fern known to be present at only one site in the conservancy;
- Dicranopteris linearis rare thermal fern;
- Nephrolepis 'cf cordifolia' rare thermal fern;
- Tupeia antarctica rare mistletoe, a hemi-parasite found in lakeshore reserves and on private land in the south-western bays of Lake Taupo and on Motutaiko Island;
- *Utricularia australis* submerged aquatic plant (also known as bladderwort) present in south Taupo wetland;
- Ileostylus micranthus hemi-parasitic mistletoe of local status which occurs only on Motutaiko Island in this conservancy;
- Thismia rodwayi a very localised small litter-dwelling plant which lives in association with a fungus;
- *Pimelea tomentosa* small shrub present in Kawakawa Bay.

Important plant communities in the basin include:

- pohutukawa (*Metrosideros excelsa*) and northern rata communities around the shores of Lake Taupo;
- silver tussock remnants;
- frostflat associations at Rangitaiki and on private land;
- wetlands;
- kowhai-kanuka associations on river terraces and lake margins;
- turf communities on lakeshores;
- beech forest remnants, south, west and north of Lake Taupo;
- geothermal plant communities.

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#### (d) Fauna

Wildlife in Taupo Basin considered priority species for protection (see appendix 3) are:

- North Island brown kiwi unconfirmed reports around lakeshore;
- North Island kaka occasionally seen in winter;
- North Island falcon in low numbers but widely distributed;
- New Zealand dabchick Lake Taupo is a stronghold for this species;
- kereru (New Zealand pigeon) in low numbers but widely distributed;
- Australasian bittern Lake Taupo wetlands a stronghold;
- royal spoonbill regular visitors;
- Caspian tern small resident population on southern shores of Lake Taupo;
- blue duck low numbers on south-eastern tributaries of Lake Taupo;
- white heron occasional visitors;
- long-tailed bat isolated records throughout Taupo Basin;
- short-tailed bat last recorded 30 years ago;
- native fish koaro in low numbers but widely distributed over whole Lake Taupo catchment;
- small-scaled skink known from Motutaiko Island.

The forest remnants, secondary forest associations, wetlands and waterways of Taupo Basin provide habitat for a wide variety of more common species. Over 50 species of bird alone inhabit Lake Taupo and its associated environs.

#### (e) **History**

The history of occupation is reflected in a rich and diverse range of archaeological sites but to date only a small amount of systematic site recording has been undertaken. Most of the sites recorded are close to the lake in areas threatened by urban development, land development and forestry operations, or where sites were being damaged by vandalism or fossicking.

There are over 100 recorded pa sites in Taupo Basin, many kainga, pits, caves and shelters, including some containing rock art. Incised and pigment drawings on shelter walls predominate with a wide range of themes evident. Around half of the rock art sites recorded in the North Island are within Tongariro/Taupo

Conservancy. There are also a large number of burial sites, the majority of which are unrecorded.

Relatively few European historic sites have been recorded in Taupo Basin and those that have are mostly connected with early pastoral activity and timber, flour and flax milling. Probably the most notable in terms of surviving field evidence are the redoubts (both Maori and European) associated with the Armed Constabulary's campaign against Te Kooti in 1869-1870. Three of these redoubts are preserved for historic purposes, at Opepe, Taupo and Runanga.

The basin was part of an important early tourism route from Rotorua, across Lake Taupo, around the volcanoes and down the Wanganui River. The geothermal attractions at Wairakei ranked with the best in New Zealand at this time and were a feature of the route.

### 4.3.6 Threats

Natural and historic values are threatened throughout Taupo Basin by farming, hydroelectric power development, afforestation and urban expansion and by introduced plant pest species (including lake plant pests), browsing and predatory animals, and fire, as well as private sector tourism demands for the development of infrastructure, activities and services at popular natural attractions. Overuse is a significant threat, particularly to natural values.

The majority of secondary vegetation associations around the lakeshore are the result of both European and pre-European fires. Today they remain extremely vulnerable to fire.

Most forested areas have suffered varying degrees of modification from browsing animals. Goats have escaped into many reserves as a result of the decline in the goat farming industry in the late 1980s. The exclusion of these animals and all other livestock from protected areas is essential. This requires both new fencing and maintenance of existing fencing. Pigs are a major threat to the secondary growth associations within the lakeshore reserves. Encouraging recreational pig hunters is important to ensure numbers are controlled. The department's input into possum control in the Taupo Basin is limited to small defined areas of very high natural value, such as the pohutukawa (Metrosideros excelsa) stands in Kaiapo Bay, the rata in Waihora Bay and mistletoe at various sites. It is important to note that possums are a significant threat to indigenous bird species, particularly when nesting. Considerable protection is offered by possum control undertaken by regional councils for animal health purposes. The western side of Taupo Basin lies within the central North Island endemic area for Bovine tuberculosis and possum control is a major means of managing this disease.

Rats, cats, mustelids, mice, hedgehogs, wasps and dogs pose a significant predatory threat to wildlife in Taupo Basin but the department's ability to manage these threats is limited.

Many of the protected areas managed by the department in Taupo Basin are small, isolated remnants. This reduces their overall value as wildlife habitat and renders them

vulnerable to outside influences. They are, however, still very important for invertebrates and as a source of regeneration.

Plant pest species (heather (*Calluna vulgaris*), willow, hawkweed (*Hieracium*), pampas, waternet) are a particular threat to short ground cover vegetation and shrubbery growing on frostflats and wetlands. Climbing plant pests such as old man's beard, climbing spindle berry (*Celastrus orbiculatus*) and honeysuckle threaten forest remnants and regenerating areas. Shade-tolerant shrubby plant pests (cotoneaster, firethorn (*Pyracantha*)) and wild ginger (a recent arrival in the area) are also a threat to forest structure and regeneration.

Human threats to species and communities are high and require considerable effort in terms of public education. Collectors pose a serious threat to woodrose (*Dactylanthus taylori*), particularly on private land but also in reserves, as the woodrose it creates is a marketable commodity. Firewood merchants, plantation foresters and farmers continue to clear kanuka communities. Thermal areas are under threat from geothermal development.

Game bird shooters threaten frostflats and wetlands in some places through construction of maimai, vehicular access and manipulation of water flows and levels. Liaison with the Eastern Fish and Game Council on these issues is important as the council is charged with preparing a game bird management plan for this region.

Lake Taupo is a pristine waterbody of national significance. The lake is threatened by inappropriate development, increasing use pressure and intensification of landuse on its margins. The problems are now well quantified and the community has a short window of opportunity to manage them. The department will work actively with agencies and landowners to achieve the goal of ensuring the Lake Taupo waterbody is maintained to the highest possible standard.

Pollution of waterways and wetlands through urban waste disposal, farming effluent and stock access is a problem in some places.

The department will seek to identify sites where natural and historic values are threatened by lack of recognition, infrastructure development, quarrying or natural processes.

The department will advocate against the adverse effects of development. These effects may include degradation of aquatic ecosystems in their natural state or clearance of indigenous vegetation and the subsequent loss of biodiversity. Examples of activities that have impacted on natural values in this way include clearance of native vegetation for forest production and hydroelectric development and tourism. The department works with the organisations involved to achieve the best possible environmental outcomes. Input may include advising on project implementation or, where there are significant environmental effects unable to be mitigated, working through statutory planning processes.

Public use is a threat in thermal areas where the effects of visitors straying from formed paths onto fragile thermal surfaces and over vegetation are long-lasting.

It is likely that many key historic resources in Taupo Basin have not yet been identified.

This is a threat to their preservation. Without knowledge of their existence and importance, developments (e.g., for roading, residential, agricultural, industrial, tourism and recreation purposes) may destroy or compromise their continued existence and value.

### 4.3.7 Public Use

Taupo Basin contains the conservancy's main population centres - Taupo, Turangi, Tokaanu, Omori, Pukawa, Kuratau, and the small settlements on the eastern shore of Lake Taupo. Public conservation lands close to these communities receive high use from permanent and seasonal residents and visitors.

In terms of the conservancy's recreation opportunities, Taupo Basin contains the greatest proportion of urban recreation. Extensive tracts of rural setting cover the farmland and exotic forestry to the north and east of Lake Taupo. The fringes of the western shores of Lake Taupo provide Taupo Basin's main backcountry opportunities. There are no wilderness opportunities in this place.

The department's facilities and services are concentrated on the urban fringes of Taupo and Turangi, on the natural remnant reserves along state highways 1 and 5 around the shores of Lake Taupo, and at key visitor attractions such as Huka Falls and the Tokaanu and Craters of the Moon thermal areas. The natural remnant areas are largely surrounded by exotic forest or farmland and hence are important places in terms of the conservancy's ability to provide for a range of recreation opportunities. Backcountry areas of the western bays of Lake Taupo are as yet largely free of recreational infrastructure but they are often accessed by large numbers of people by boat.

The summer months of December to April (including Easter) are the times of highest use in Taupo Basin. Winter trout fishing brings high numbers of anglers to the tributaries of Lake Taupo, in particular the Tongariro River. Areas receiving high use and having the greatest recreation significance are (in no particular order):

- Tapuaeharuru Bay/Taupo township foreshore area from the Taupo Boat Harbour to Five Mile Bay and Acacia Bay;
- eastern lakeshore areas around settlements/beach areas such as Motutere and Waitahanui;
- Kuratau/Omori/Pukawa area;
- western bays beach areas such as Te Hapua Bay, Boat Harbour, Whanganui Bay, Waihaha Bay, Whareroa and including Kinloch/Whangamata Bay;
- the Tongariro River, especially from Blue Pool downstream;
- the Huka Falls area, Spa/Huka Walkway;
- the Craters of the Moon thermal area;
- Tokaanu thermal area;

- Tongariro National Trout Centre;
- Tongariro River delta;
- Waiotaka, Waimarino, Tauranga-Taupo, Hinemaiaia, and Waitahanui rivers.

Taupo District Council and other agencies or organisations are involved in the management of public use at some of the above areas and hence make a major contribution to the recreation opportunities within Taupo Basin.

Issues facing recreation management in Taupo Basin include overcrowding of popular angling pools; conflicts between different recreation visitors such as anglers and rafters or kayakers, mountain bike riders and walkers; the management of sewage and toilet systems in close proximity to water bodies; and the peak summer congestion and related impacts occurring in areas associated with boat launching facilities, water-ski lanes and accessible popular beaches. Overnight occupation by campervans is increasing on public conservation land and creates waste disposal and potential congestion problems.

Overuse is a threat to natural values and visitor experience. Inappropriate use is equally significant. The development of heavy infrastructure such as hotel accommodation on public conservation land or poor mixing of passive and active recreation will achieve unacceptable environmental results.

The department will manage visitor use near waahi tapu sites on public conservation land at the appropriate level and will advocate for an appropriate community ethic towards such sites.

# 4.3.8 Research, Ecological Survey and Monitoring

Research, ecological survey and monitoring carried out by the department focuses on natural and historic resources. Recreation impacts and the need to assess the effectiveness of management of these resources is critical. The land inventory sheet for each site administered by the department identifies the specific survey and monitoring being undertaken. The priorities for these sites are determined by the general criteria outlined in 3.1.7 of this document.

# 4.3.9 Areas of High Value Not Administered by the Department

- Lake Taupo, its shores and most of its tributaries. The lake margins support many special vegetation types including cliff vegetation and lakeshore herbfields. The lake is of significance to iwi and the broader community.
- Hinemaiaia and Lake Kuratau.
- The South Taupo Wetland. This very large wetland is of international importance and contains a mosaic of different vegetation types which support several threatened species of birds and plants.

- Ripia Valley Lake Pouarua and associated wetlands. There are few lakes in this ecological district.
- Lake Rotongaio.
- Motutaiko Island as this island has no possums on it, there is the potential for ecological values not found on the mainland. The island is culturally significant to iwi.
- Podocarp forest remnants at Oruanui there is very little forest left in the Atiamuri Ecological District.
- Silver tussock and frostflat at Kawakawa Bay these are small remnants of vegetation types which were once much more common in the area.
- Thermal areas surrounding Waihi these support very specialised vegetation in communities which vary from place to place. Many of them contain rare ferns.
- Thermal areas surrounding Wairakei.

# 4.3.10 Management Objectives

The following objectives must be read in conjunction with the principles, objectives and implementation provisions contained in parts II and III. Together these components are the key determinants in decision making.

- To achieve an integrated approach to protect the natural and historic values of all land in Taupo Basin, regardless of tenure, in co-operation with other landowners and local authorities.
- To achieve, through advocacy, greater protection of areas and habitats of high natural and historic value on private land, firstly through liaison and co-operation with other landowners and secondly through statutory planning processes.
- To achieve, through advocacy, the protection of lakes, rivers, streams and wetlands. (Lake Taupo is the receiving water for Taupo Basin's catchment. Inter-agency and community involvement in catchment protection has provided the region with very high quality water.)
- 4 To further develop the partnership with Ngati Tuwharetoa to protect natural and historic values.
- To protect fauna on a prioritised basis, according highest priority to managing threatened species and the sites essential for survival of these species.
- To protect the soil and water conservation values of areas managed by the department, primarily by animal pest control, fire prevention and fencing where appropriate.

- 7 To provide for continued recreation day use of reserves and other protected areas and, where appropriate, to enhance passive and light active use of reserves through maintenance of roads, foot access and amenities.
- 8 To retain boat access to those existing reserves which have no road access. (This recreational opportunity is not commonly available in conservancies outside Tongariro/Taupo.)
- 9 To continue restoration of lakeshore reserves with community planting programmes.
- To take into account the Lake Taupo Conservation Strategy (1990) in the 10 ongoing management of Lake Taupo.
- 11 To record the state of rock art and investigate methods of protecting and conserving this art work.
- To investigate the feasibility of and need for a walkway around all or parts of the 12 western side of Lake Taupo and, if acceptable, develop the appropriate infrastructure with assistance from other agencies, organisations and landowners.
- 13 To undertake survey and research to gain a better understanding and knowledge of natural and historic values on and off public conservation land.
- To provide appropriate reserve status for Huka Falls and Craters of the Moon to 14 recognise their national importance.

# 4.4 Place - Kaimanawa-Moawhango

### 4.4.1 Introduction

The forested mountainland of Kaimanawa Forest Park represents a contrasting geological landform to the volcanic landscape of Tongariro National Park and the Rangipo Desert and provides easily accessible recreation opportunities. The Moawhango Ecological District represents a unique remote area of the North Island, noted for its dramatic landforms, rare plants and wild horses (see *Kaimanawa-Moawhango* map).

Within this place, the department manages six sites covering 84,056 hectares. The biggest land unit is Kaimanawa Forest Park (77,887 hectares). The forest park is managed according to the Kaimanawa Forest Park Management Plan, which was prepared through a full public consultation process and contains detailed objectives and policies, including policies on leased areas within the park managed by the department. The Kaimanawa Forest Park Management Plan is consistent with the policies contained within this strategy and will remain the principal management document for the park.

# 4.4.2 Physical Description

### (a) Topography and Geology

The Kaimanawa Ranges comprise a series of high ridges with rounded crests but steep sides between the headwaters of the Mohaka, Ngaruroro, Rangitikei and Tongariro rivers. In the

south, more rolling plateaus and steep land are separated by deeply incised gorges, wide river valleys or high altitude basins from the Moawhango country. Altitude ranges from 500 metres along the north-western foot of the Kaimanawa Ranges to 1,727 metres on the Makorako Range.

The Kaimanawa Ranges are aligned north-east/south-west, part of the North Island mountain axis. They are composed of Permian, Triassic and Jurassic greywacke (sandstone and argillite) and schist (150-250 million years old) with outcrops of younger ignimbrite. The Moawhango area is more complex with greywacke in the north, tertiary marine sandstone, limestone and siltstones towards the south, mantled by recent andesitic ash with Taupo pumice thickening to the north. Terraces have formed where Taupo pumice ponded in valleys.

Soils reflect this complex landform and geological pattern. In the Kaimanawa Ranges soils are strongly leached yellow-brown pumice over older brown silty andesitic ashes, with coarse pumice alluvial soils in the valleys. Steep land soils

predominate in the Moawhango with coarse pumice alluvial soils in the valleys, deep, well-drained volcanic soils on rolling slopes, and organic soils in high altitude peat basins.

#### (b) Climate

Two main bioclimatic zones influence Kaimanawa-Moawhango - southern cool temperature (upper montane) and sub-Antarctic (subalpine) - although the highest tops experience low Antarctic (low alpine) conditions (January mean temperatures < 10°C to < 15°C). Winters are cool (< 3°-5°C). Snow lies frequently on the tops for several days during winter and may lie for weeks in cold winters.

The annual rainfall is 1,200-4,000 millimetres spread fairly evenly throughout the year. Winter and spring months are the wettest. Rainfall is most variable in the summer in the north and during autumn in the south.

Westerly winds predominate but Kaimanawa-Moawhango is also exposed to the east. The inland location east of the higher volcanoes of Tongariro National Park creates subcontinental and rain shadow effects.

#### Vegetation (c)

This part of the conservancy contains most of two ecological districts, Kaimanawa and Moawhango. Originally both districts would have been forested, with beech forest over most of the area, podocarp forest along the lower western edge of the Kaimanawa, and kaikawaka forest in the south of the Moawhango. At higher altitudes, forest would have given way to tussock, alpine herbfields and scree slopes. Peat bogs occurred in areas of high cloud cover and in frost hollows.

Maori and European fires modified the northern fringes of the Kaimanawa Ranges, some of the river valleys in the Kaimanawa Ranges and most of the Moawhango Ecological District. Generally, however, very little has been put into pasture or plantation forest and only small parts of the Kaimanawa Ranges have been logged. Most of the vegetation in the northern half of Kaimanawa-Moawhango is in a relatively natural state.

In the Moawhango Ecological District the principal vegetation cover is tussock grasslands. These are less modified than anywhere else in the conservancy. Plant pest invasion is minimal except close to Waiouru, where farming attempts persisted until recently, and in areas frequented by wild horses. Occasional remnants of beech and kaikawaka forest are present.

Many of the wetlands in the Moawhango are relatively unmodified. They contain special plants, many of which are endemic to the area or occur elsewhere only in the South Island.

### (d) Native Fauna

The relatively unmodified indigenous vegetation of Kaimanawa-Moawhango provides habitat for a wide range of the region's original wildlife. In the Kaimanawa Ranges a range of lowland montane and alpine habitats remain intact, allowing seasonal movements of wildlife between these habitats.

### (e) Animal Pests

Sika deer are perhaps the most significant of the introduced mammals in Kaimanawa-Moawhango. Through an extensive monitoring programme the department is beginning to understand their impacts. They occupy forest and scrubland and feed in open areas, generally after dark as a result of intense hunting pressure. Density varies depending on habitat and hunter accessibility. A recreational hunting area was gazetted over 24,000 hectares of Kaimanawa Forest Park in 1982 in recognition of the sika herd's significance as a hunting resource.

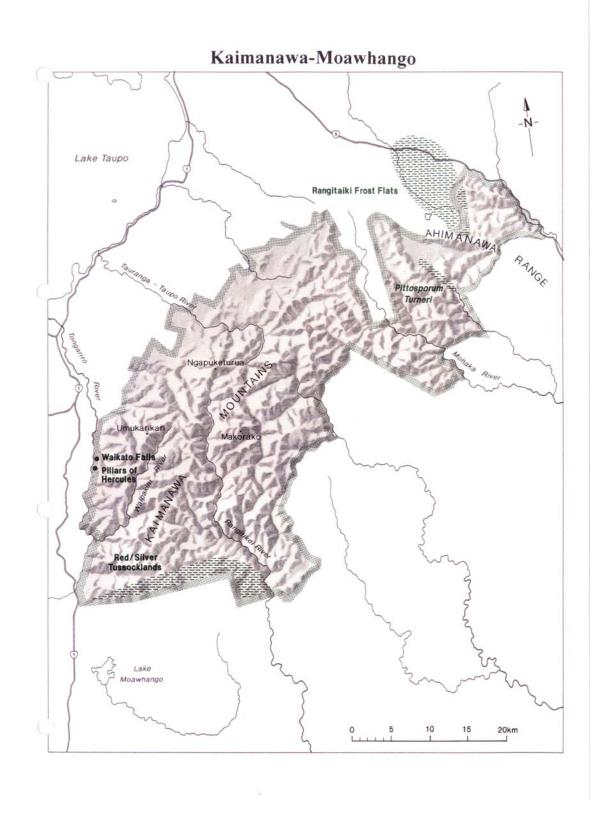
Red deer also occur over the whole Kaimanawa-Moawhango. They tend to be less competitive than sika deer in all habitats except the alpine zones and are most common in the southern and central regions.

Wild pigs are restricted to the warmer lower altitude margins on the northern and eastern perimeter and densities are usually low.

Wild horses use the southern part of Kaimanawa-Moawhango but the bulk of their range lies in neighbouring Wanganui Conservancy. The horses have a significant impact on the highly diverse flora of the Moawhango Ecological Area. The herd is managed on a day-to-day basis by the field staff of the Turangi and Mangaweka field centres.

Possums occur throughout Kaimanawa-Moawhango with densities generally decreasing with altitude.

Rats, cats, mustelids and hedgehogs are widespread. Hares are a concern in the alpine regions of the central Kaimanawa Ranges and rabbits are found mainly on the tussock grassland to the south.





### 4.4.3 **History**

In pre-European times, Maori used the Kaimanawa Ranges for settlements and traditional travel routes. The northern Kaimanawa Range was an area that saw warfare involving Ngati Whiti, Ngati Maruahine, Ngati Tuwharetoa and Ngati Kurapoto.

Early European influence was associated with the introduction of sheep to the Kaimanawas' large tracts of tussock country. Merino sheep were introduced around Lake Taupo by the Grace family in 1856 but were killed off, partly by wild dogs during the New Zealand wars. Establishment of sheep was assured when Alfred Cox took up a lease south of the Napier-Taupo road in 1867 and the Birch brothers brought the first sheep to inland Patea in 1868.

Gold was sought up the rivers and streams draining into Lake Taupo from the Kaimanawa Ranges as well as in the headwaters of the Rangitikei, Taruarau and Ngaruroro rivers. The alleged site of Bracken's Reef, reputedly covered by a large landslip, is one of two streams within the Kaimanawa Forest Park boundary. This reef was reported by Captain William McDonnel and Christopher Bracken in September 1869.

Indigenous timber milling occurred along the fringes of the Kaimanawa Ranges, most significantly in the Clements Road area where red beech was the dominant crop.

General isolation and rugged landscape have kept the Kaimanawa Ranges free from intensive land use such as exotic forestry or farming and they remain a mountainous area for backcountry recreation.

#### 4.4.4 **Public Conservation Land**

There are some 83,918.803 hectares of reserves, forest park and conservation areas in Kaimanawa-Moawhango.

Land Inventory Number	Name	Area (hectares)
60012	Waingakia Conservation Area	821.3000
60051	Kaimanawa Forest Park	
60070	Rangitaiki Conservation Area	5,110.3461
60080	Opoto Scenic Reserve	93.4951
60128	Runanga Armed Constabulary Historic Reserve	5.9185

### **4.4.5** Values

### (a) Physical Landscape

Mountain building during the Kaikoura Orogeny was responsible for the shape and extent of the present relief. The steep Kaimanawa Ranges were formed by uplifting of the greywacke which underlies most of the North Island. Ignimbrite and andesitic layers extend into the Kaimanawa valleys from Taupo volcanic zone and the ridges are covered in a thin mantle of tephra from Taupo volcanism.

Beech forest and podocarp associations cover most of the ridges of the Kaimanawa Ranges. The highest areas are covered in alpine vegetation, contrasting with the mainly barren volcanoes of Tongariro National Park to the west.

Although beech forests and tussock grasslands dominate the valleys of Kaimanawa-Moawhango, the area to the south-west contains the area of greatest biodiversity in the conservancy.

The most devastating change to the landscape was caused by the Taupo eruption around 1,800 years ago. This, along with human arrival and its effect on fauna and flora, are responsible for today's landscape.

### (b) Geopreservation

Only two sites have been classified within the geopreservation inventory to date - Pillars of Hercules on the Tongariro River and the Kaimanawa Schist. Both are classed as regionally important and neither is vulnerable as they are on public conservation land. The Mount Azim gorge on the Moawhango River and other Moawhango features may be worthy of inclusion in the landform section of the inventory.

### (c) Flora

Plants considered priority species for protection in Kaimanawa-Moawhango (see appendix 4) are:

- Dactylanthus taylori parasitic woodrose found on the western margins of the Kaimanawa Ranges;
- Pittosporum turneri a small rare tree of forest margins in the Ripia Valley on the northern margin of the Kaimanawa Ranges;
- mistletoes *Peraxilla tetrapetala*, *P. colensoi* hemi-parasites on beech. Very limited in their distribution, occurring in scattered locations in the Kaimanawa Ranges and in a forest remnant in the Moawhango;
- Moawhango special plants a number of unnamed herbs including

Ranunculus recens 'Moawhango' and some with interesting distributions occur in bogs and seepages in the Moawhango Ecological District;

- Logania depressa a low shrub found only once by William Colenso;
- Agrostis imbecilla a native grass that grows east of the Desert Road.

Important plant communities include:

- kanuka-manuka shrublands and forest along forest margins, including those with *Pittosporum turneri*;
- kahikatea grove adjacent to the Whitikau River;
- beech-podocarp associations on the western margins of the Kaimanawa Ranges;
- peat bogs, both basin bogs and cushion bogs with small tarns on range tops, and seepage areas;
- tussock grassland on river terraces and in the Moawhango Ecological District. Red, silver and hard tussock;
- beech and kaikawaka remnants in the Moawhango Ecological District.

### (d) Fauna

Wildlife in Kaimanawa-Moawhango considered priority species for protection (see appendix 3) are:

- North Island brown kiwi isolated populations and/or individuals are present throughout the Kaimanawa Ranges and evidence suggests numbers are still declining;
- North Island kaka widely distributed throughout in low numbers;
- New Zealand falcon widely distributed throughout in low numbers;
- kereru (New Zealand pigeon) widely distributed throughout in low numbers. Higher numbers in lower altitude forests;
- blue duck widely distributed. This region is a stronghold for this species;
- banded dotterel breed in summer within Moawhango Basin;
- yellow crowned parakeet widely distributed;
- long-tailed bat widely distributed in low numbers;
- short-tailed bat increased number of sightings in 1994;

- small-scaled skink known to occur in the southern Kaimanawa area although distribution is unknown;
- native snails *Powelliphanta marchanti* are relatively common in the Otamateanui Stream catchment although they remain threatened;
- native fish koaro have been recorded in most river systems. The most notable exceptions are the upper Tongariro catchment and the Tauranga-Taupo River. Banded kokopu have been recorded in the Mohaka catchment and it is quite possible they exist within the Kaimanawa-Ahimanawa area, although there are no records of their presence.

Kaimanawa-Moawhango provides habitat for a variety of more common birds, invertebrates, lizards and introduced wildlife.

### (e) History

There are no key historic places in this area but the numerous Maori place names which occur within and adjacent to Kaimanawa Forest Park on early maps and in Maori Land Court records are evidence of widespread use of the area by the Maori in pre-European times. Maori settlements, sites associated with events in traditional history, named Maori tracks and burial caves have all been reported in Maori history but presently lack physical or archaeological evidence.

Physical evidence of human activity on these sites is lacking because they are situated in relatively inaccessible areas. The known Maori tracks are perhaps an exception as, in some cases, flakes of obsidian (volcanic glass) used as tools by the Maori have been found near river crossings, on saddles, and at other places along these routes.

On the true left bank of the Oamaru River above the Kaipo confluence in the vicinity of Te Rouiti Pa, Te Tounui or Te Rourahi Pa and the Paengaroa cultivation are areas associated with Maori settlement and warfare involving the Ngati Whiti, Ngati Maruahine, Ngati Tuwharetoa and Ngati Kurapoto tribes in the mid-1600s. Some place names identify occupation, e.g., Te Ranga a Whakarua, Te Wai o Tupuritia and Tapui o Maruahine. Other sites traditionally identified with first settlement of the Ngati Tuwharetoa in the Taupo area in the mid-1500s are Kotipu (Woody's Tongue), Rangitaiki and Otuariki (locality unknown).

Sites relating to early survey and gold-mining activities include the mine shaft of the pioneer gold-mining claim (1885) on the Oruamatua-Kaimanawa IV Block, the remains of the last Motumatai Hut, the Stanfield Whare (built in 1952-1954) and the site of the original Motumatai whare which was constructed prior to 1874. Other early hut sites exist in the Te Apunga (Kaimanawa), Golden Hills and Boyds Rock areas.

### 4.4.6 Threats

The major conservation threats in Kaimanawa-Moawhango are animal pests (browsers, grazers and predators), introduced plants [particularly *Pinus contorta*, heather (*Calluna vulgaris*) and hawkweed (*Hieracium*)] and fire.

The central Kaimanawa and Moawhango regions have an extensive history of fire, both natural and induced, from pre-European and European times. Most of the tussock and scrublands below the natural bushline are the result of fire. They remain vulnerable to wildfire which has significantly altered this landscape over time.

Although the vegetative cover remains intact over the majority of this place most plant associations have suffered various degrees of modification from browsing and grazing animals over the past 100 years. Sika deer, red deer, wild horses, possums, hares, rabbits and, earlier this century, sheep, all played a role in this modification.

Control of deer in the region is largely by recreational hunting although commercial recovery by helicopter has been and remains a management tool in more difficult and isolated areas. Deer numbers are high over parts of Kaimanawa-Moawhango. Even at a low density their presence has some ecological cost.

Habitats present in the Kaimanawa-Moawhango are not well suited to possums and numbers are generally low, although densities are higher in the lower altitude forests along the northern boundary. This area lies within the central North Island endemic area for Bovine tuberculosis and therefore possum control in the lower altitude areas is undertaken by regional councils for animal health purposes, offering some protection to natural values. The department does not control possums in this place, relying totally on commercial control which fluctuates greatly with the demand for fur.

Rats, cats, mustelids and dogs all pose significant predatory threats to wildlife. Although the department's ability to manage these predators is generally limited, it will restrict dogs in areas where kiwi and blue duck populations remain.

Wild horses create damage in the Moawhango Ecological District by grazing indigenous and endemic flora and by trampling fragile bog habitat.

Pinus contorta has the potential to be a serious threat to the Kaimanawa Ranges but in general it is limited in its distribution and is controllable. In the Moawhango Ecological District Pinus contorta is more widespread because of its proximity to plantation seed sources at Karioi. The New Zealand Army has a control programme in the area. Heather (Calluna vulgaris) and hawkweed (Hieracium) are serious threats to the important tussock and bog communities in the Moawhango and Rangitaiki river valleys. Research is underway to develop methods to control these species.

The department will seek to identify sites where natural and historic values are threatened by lack of recognition, infrastructure development, quarrying or natural processes.

The department will advocate against the adverse effects of development. These effects may include degradation of aquatic ecosystems in their natural state or clearance of indigenous vegetation and the subsequent loss of biodiversity. Examples of

activities that have impacted on natural resources in this way include clearance of native vegetation for forest production and hydroelectric development. The department works with the organisations involved to help achieve the best possible environmental outcomes. Input may include advising on project implementation or, where there are significant environmental effects unable to be mitigated working through statutory planning processes.

### 4.4.7 Public Use

Public use of Kaimanawa-Moawhango is lower than that of Taupo Basin and Tongariro-Ruapehu. This by no means indicates lesser value of the area.

Recreational activity is concentrated on the readily accessible backcountry opportunities on the western boundary access roads, off State Highway 1, and at Clements Road in the north. In these areas facilities provide for informal camping, sightseeing, walking, tramping, picnicking and mountain biking. Significant rafting, kayaking and angling opportunities occur on the western boundary of Kaimanawa Forest Park on the upper reaches of the Tongariro River.

Kaimanawa-Moawhango provides the conservancy's greatest proportion of remote uses. The Kaimanawa Forest Park Management Plan has established an area containing no infrastructure in the upper Rangitikei catchment. This area, known as the Rangitikei Remote Experience Zone, provides the largest expanse of land closest to the department's wilderness criteria. Use of the area is low but its significance is very high because few such opportunities remain in the North Island. The trophy rainbow trout fishery in the Rangitikei requires special consideration in the maintenance of the wilderness aspects of the valley to ensure protection of the experience gained by visitors.

Kaimanawa-Moawhango is principally used by recreational hunters attracted by sika and red deer. In recognition of the importance of the sika herd the northern part of Kaimanawa Forest Park was gazetted a recreational hunting area in 1982 and is now one of the most highly used recreational hunting areas in the country.

Aerial access to designated landing sites throughout much of the area adds a further valuable dimension to public use, allowing ready access for hunters, anglers and rafters to backcountry areas.

An issue facing recreation management for Kaimanawa-Moawhango is the need to monitor aerial access levels to determine if and when unacceptable effects are occurring on the range of recreation opportunities available. Other issues are the potential to enhance backcountry roadend opportunities around the fringes of Kaimanawa Forest Park, the high non-compliance with the department's hut fee system in this place, and the need to resist pressures to upgrade track and hut facilities to cater for higher visitor numbers, given that such action would markedly diminish the availability of remote opportunities experience in the conservancy.

# 4.4.8 Research, Ecological Survey and Monitoring

Research, ecological survey and monitoring carried out by the department focuses on natural and historic resources. Recreation impacts and the need to assess the effectiveness of management of these resources is critical. The land inventory sheet for each site administered by the department identifies the specific survey and monitoring being undertaken. The priorities for these sites are determined by the general criteria outlined in 3.1.7 of this document.

# 4.4.9 Areas of High Value Not Administered by the Department

Most of the Moawhango Ecological District is administered by the New Zealand Army. The Protected Natural Areas Programme (PNAP) report outlines the values of the area and recommends sites to be protected. These include representative areas of forest remnants and large parts of the important wetlands. A beech forest remnant at South Lawn contains the only mistletoe found in the district.

The rare *Pittosporum turneri* grows in the Ripia Valley on the lower northern slopes of the Kaimanawa Ranges. It is under threat from land clearance for afforestation.

The central area of the Kaimanawa Ecological District, including some of the mountain tops and other areas of unmodified forest, is privately owned.

# 4.4.10 Management Objectives

The following objectives must be read in conjunction with the principles, objectives and implementation provisions contained in parts II and III. Together these components are the key determinants in decision making.

- To achieve an integrated approach to protect natural and historic values of all land in Kaimanawa-Moawhango, regardless of tenure, in co-operation with other landowners and local authorities.
- 2 To manage Kaimanawa Forest Park in accordance with the Kaimanawa Forest Park Management Plan.
- To achieve, through advocacy, greater protection of habitats and species of high natural and historic value on private land, firstly through liaison and co-operation with other landowners and secondly through formal statutory processes.
- 4 To maintain the diverse range of recreational opportunities within Kaimanawa Forest Park, taking into account the need to preserve the qualities of the Rangitikei Remote Experience Zone and the need for sensitive use of the fragile Moawhango Ecological Area.
- 5 To maintain and, where appropriate, enhance public access to public conservation land.

- To protect fauna on a prioritised basis, according highest priority to managing threatened species and the sites essential for survival of these species.
- 7 To manage introduced animal species so as to minimise or remove their adverse effects on native ecosystems.
- 8 To protect the soil and water conservation values of areas managed by the department, primarily by animal pest control, fire prevention and fencing where appropriate.
- 9 To undertake survey and research to gain a better understanding and knowledge of natural and historic values on and off public conservation land.
- To ensure that plant pest species are not introduced to Kaimanawa Forest Park by advocating to adjoining landowners to remove serious threats to indigenous biodiversity [e.g., *Pinus contorta*, hawkweed (*Hieracium*), heather (*Calluna vulgaris*)].
- 11 To introduce means of controlling the frequency of aerial access to designated landing points (as defined in Kaimanawa Forest Park Management Plan) should it become apparent that visitor experiences are being affected by overcrowding and aircraft disturbance.
- To ensure that the Kaimanawa-Moawhango lands are maintained to provide consistent management with neighbouring conservancies, particularly Hawke's Bay which includes the Kaweka and Ruahine ranges.

# 4.5 Place - Tongariro-Ruapehu

### 4.5.1 Introduction

About 850,000 visitors come to Tongariro National Park each year to enjoy a diverse range of recreation. Tongariro National Park received World Heritage Site status in 1988 for its natural landscape values. A criteria change acknowledged the cultural landscape values of the park in 1993, recognising the special significance of the mountains to Ngati Tuwharetoa and Whanganui iwi. Tongariro become the first national park recognised under the new criteria and only the seventeenth place in the world with dual status.

The department manages 28 sites in Tongariro-Ruapehu, covering 88,566 hectares (see *Tongariro-Ruapehu* map). Most of the sites are conservation areas. Tongariro National Park is the largest land unit, covering 79,669 hectares. The park is managed according to the Tongariro National Park Management Plan, which was prepared through a full public consultation process and contains detailed objectives and policies for the management of the park. The plan is consistent with the policies contained within this strategy and will remain the principal management document for Tongariro National Park.

## 4.5.2 Physical Description

# (a) Topography and Geology

Tongariro-Ruapehu comprises active and dormant andesitic volcanoes surrounded by an extensive lahar ring plain. Altitudes range from 360 metres near Tokaanu in the north to 2,797 metres on ice-capped Mount Ruapehu, the highest point in the North Island.

The dominant landforms are two chains of composite volcanoes and their ring plains. Ruapehu, Ngauruhoe and Tongariro form the higher, active chain aligned north-east/south-west, while Pihanga, Tihia and Kakaramea form a lower chain at right angles to the first. Isolated features like the rhyolitic Mount Kaharua, Motupuhi Island on Lake Rotoaira and other vents, plus lava flows, lakes, lahar outwash plains, fault scarps, gorges, and glacial landforms are significant features. The region also has an abundance of young constructional landforms of great beauty.

Soils are generally strongly or moderately leached coarse soils developed from variable covers of recent andesitic ash, lahar debris, Taupo pumice and older brown silty andesitic ash. Stony and shallow alpine soils cover higher parts of the mountains and coarse pumice alluvial soils predominate in the northern valleys. Soils become finer and older (ash dams) towards the south-west.

### (b) Climate

Consistent with the 2,400 metres altitude variation, a wide range of bioclimatic zones influence Tongariro-Ruapehu. Cool temperature conditions prevail up to 1,000 metres, sub-Antarctic (subalpine) up to about 1,400 metres, low Antarctic (low alpine) up to about 2,200 metres, and high Antarctic above that. Summers are relatively cool (January mean temperature < 5°C on the higher volcanoes up to 16°C at Turangi). Frosts occur every month at Whakapapa village (1,100 metres) and also at Turangi in some summers.

Winters are cool (July mean temperature -1.3°C at Whakapapa, 6°C at Turangi), with snow falling to the lowest levels but normally settling only above about 500 metres. Snow lies for about six months above 1,800 metres. Winter snow remains in patches down to about 2,100 metres through most summers. Glacier ice covers about four square kilometres of the summit area and valleys of Ruapehu.

The annual precipitation range of 1,200 to 5,000 millimetres is distributed fairly evenly throughout the year. Winter and spring are the wettest seasons and autumn is generally the driest and most variable. February became noticeably drier (and warmer) at Whakapapa village between 1930 and 1986.

Winds are predominantly from the westerly quarter but strong winds from the southerly quarter are frequent during winter.

## (c) Vegetation

This area contains all of the higher altitude parts of Tongariro Ecological District and extensive wetlands around lakes Otamangakau and Rotoaira. Although many of the same species are present in Tongariro-Ruapehu mountains and the Kaimanawas, the vegetation communities are different in character. One reason for this is that the mountains here are of relatively recent volcanic origin compared with those in the nearby Kaimanawa-Moawhango which are of older sedimentary origin later overlayed with pumice.

In prehistoric times the whole montane area was covered with forest below the natural tree line. Above the tree line was a shrub belt. Alpine herbfields occurred at high altitudes amongst scree slopes and occasional seepage areas. Peat bogs occurred throughout in areas of poor drainage.

Today, as a result of burning (both natural and human), the tree line is inverted in many places. Broad expanses of red tussock grow below the tree line with regenerating shrubs and flax-monoao wetlands to the west of the ecological area and around the lakes. In the eastern rain shadow area is desert scattered with shrubs.

In the west the forest at lower altitudes is either mountain beech, beech-rimu or mixed podocarps with some kaikawaka. Parts of the lower fringes which have been burnt support regenerating forest with a high component of kamahi. An area of podocarp-northern rata-kamahi occurs north-west of Ohakune. In the south the forest is mainly mixed beech-podocarp forest. At higher altitudes the forest is either kaikawaka and pink pine or mountain beech.

To the north and east of Tongariro and Ruapehu much of the area has been burnt and is regenerating, firstly in manuka and kanuka and then in beech or, around Ketetahi, in Hall's totara. In the Pihanga Block of the national park there is mixed podocarp-broadleaved species forest at lower altitudes with some beech above that grades into Hall's totara subalpine forest. Higher altitudes support tussock and alpine herbfields. Between Tihia and Kakaramea there is a large peat bog. Bogs which have taken thousands of years to build up occur in poorly drained alpine and subalpine areas on the western and southern slopes and on the flatter areas around lakes Rotoaira and Otamangakau.

### (d) Native Fauna

As in Kaimanawa-Moawhango the majority of habitats within Tongariro-Ruapehu remain basically unmodified and provide for a wide range of the area's original inhabitants. Populations of many threatened species of wildlife survive here. Together with the neighbouring lower altitude Plateau Forests, Tongariro-Ruapehu provides important seasonal homes for many species.

### (e) Animal Pests

Red deer occur throughout Tongariro-Ruapehu but are generally restricted to or near the forested habitats. As a result of intense hunting pressure, numbers are generally low except in isolated areas away from road access.

Sika deer occur in the north-east and continue to increase their feral range in the south; they were reported as far west as Horopito in 1991.

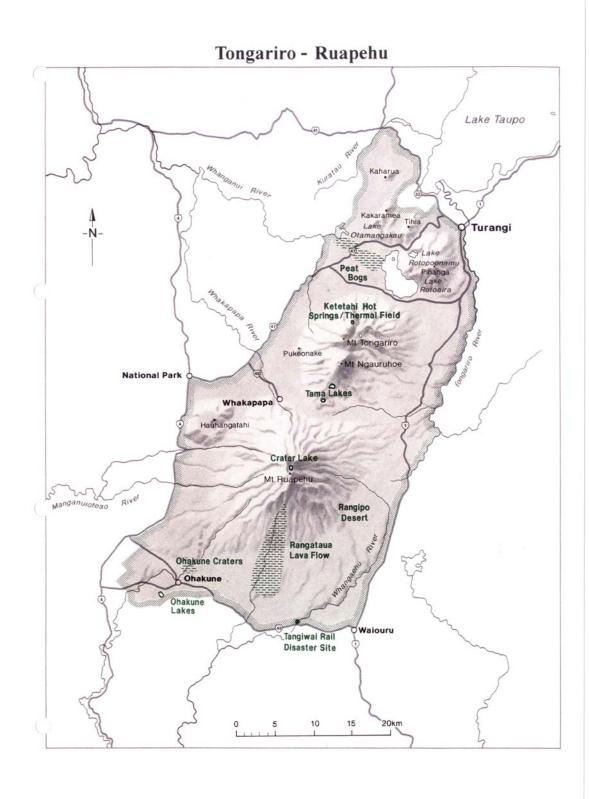
Pigs are common in the lower altitude forests of the Pihanga Block and on the northern slopes of Mount Tongariro but are generally restricted to these sites. A liberation in the late-1980s at Karioi has resulted in a small new population on the southern slopes of Ruapehu.

Isolated escapes from goat farms resulted in small populations at several locations but control operations are thought to have removed these.

Possums occur in all habitats. The highest population densities are along the kamahi-forested western margin, decreasing to minor seasonal utilisation in alpine areas.

Hares are numerous throughout the open country of Tongariro-Ruapehu and move high on the mountains in summer. Rats, cats, mustelids and hedgehogs exist throughout the area in varying densities related to altitude and habitat type.







# 4.5.3 History

Tongariro and Ruapehu are mountains sacred to the Maori, especially Ngati Tuwharetoa and Ngati Rangi who have lived beneath them for centuries. The mountains are recalled in ancient tribal stories as great forces in a universe where everything is alive. They are seen as atua, spiritual places which command and give life to the natural world, and whose wild and capricious actions can create and destroy on a huge scale. To appease such elemental forces a sacrifice or an offering was often required, or a tapu respected. The mountains are regarded with humility as well as with awe.

It came as a severe shock to Ngati Tuwharetoa that European colonists did not perceive the mountains as sacred. For 30 years after John Bidwell made the first European ascent of Ngauruhoe in 1839, Tuwharetoa successfully prevented almost all attempts to climb the volcanic summits. Bidwell's ascent was considered insensitive. The mountain was regarded as tapu and his climb was made contrary to the known views of the Tuwharetoa people.

By the 1880s it became evident that before much longer the land would pass from traditional tribal tenure and be owned and managed under the European system of laws. The only way to protect the mountains' tapu was by way of gifting the peaks to the Crown to enable the people of Aotearoa to manage them in partnership.

Under the deed of gift drawn up in the courthouse at Taupo, the summits of Tongariro, Ngauruhoe and part of Ruapehu were gifted to the Crown in 1887 for the purpose of being made into a national park. It was then recognised that the size of the gift (2,640 hectares) was too small for such a park. Large-scale purchases of land were made by the Crown in the early 1890s and by the time the Tongariro National Park Act was passed in October 1894 the park area had grown to some 25,000 hectares. Land acquisition within the legislated boundaries was not completed until 1907. Subsequent additions of land have resulted in the park being many times its original size (79,598 hectares). Present boundaries were governed to a large extent by the demand over the years for land to be put to uses such as farming and exotic forestry.

Private commercial use of Tongariro National Park was initially confined to sheep grazing which began in the late 1850s. Remains of a farm structure at Te Henga, just off the Desert Road, mark the site of one of the ultimately unsuccessful attempts at farming.

Use of the park has revolved around tourism and recreation. Tourists passed through regularly after the Desert Road was completed in 1893; now State Highway 1, this road runs along the edge of the park. The department of Tourist and Health Resorts built huts at Ketetahi and Waihohonu in 1904. Earliest use of the park was concentrated on this east side but after completion of the main trunk railway on the west side in 1908 tourist use of Waihohonu decreased. The eastern side of Tongariro-Ruapehu remains largely untouched by land use and tourism development.

The biggest impact on Tongariro National Park was the arrival of recreational skiing in 1913, with the inauguration of Ruapehu Ski Club. After the first road to Whakapapa was built in 1919 development was swift. Huts, cook houses and halls were built at Whakapapa village. Glacier Hut, the first structure on the ski area, was built in 1923 by the Ruapehu Ski Club and has been conserved on site since 1961. The Grand Chateau, still probably New Zealand's best known hotel, was built in 1929, just 10 years after the first access to Whakapapa was provided. Collectively, these buildings represent the finest group of purpose-built structures from the formative days of New Zealand's first national park.

The advent of the main trunk railway had a major influence on the development of Ohakune township in the south of Tongariro-Ruapehu, as well as on productive land uses. A major timber industry developed, based on the extensive podocarp forests of the plains below Mount Ruapehu. Much of this land was developed into farmland and market gardens.

In the north of Tongariro-Ruapehu the Tongariro Power Development scheme created Lake Otamangakau and changed Lake Rotoaira during the 1960s. This scheme affected the recreational history of the area by altering the trout fishing resource.

# 4.5.4 Public Conservation Land

There are some 88,566.75 hectares of reserves, national park and conservation areas in Tongariro-Ruapehu.

Land Inv Number	Area (hectares)	
60003	Matapuna Road Conservation Area	1.4947
60004	Manganuioteao Conservation Area	
60006	Taonui Conservation Area	
60007	Ohakune Field Centre Conservation Area	
60008	Hospital Conservation Area	
60009	Tawhero Conservation Area	
60010	Kiokio Conservation Area	
60011	Tongariro National Park	79,669.8002
60014	Horopito West Scenic Reserve	
60015	Rangataua Scenic Reserve	
60016	Mangaehuehu Scenic Reserve	
60020	Rangataua No. 2 Conservation Area	1,290.0000
60024	Otamangakau Wetlands Conservation Area	
60025	Mangamingi Stream Conservation Area	470.5719
60026	Swamp Conservation Area	43.1502
60027	Mangamutu Conservation Area	5.1091
60085	Rangataua Conservation Area	6,710.0000
60107	Pihanga Scenic Reserve	
60116	Highway 47A Conservation Area	
60125	Ohakune Lakes Scenic Reserve	90.9361
60126	Makaranui Conservation Area	
60146	Thames Street Conservation Area	0.0265
60147	Mangateitei Road Conservation Area	
60149	Highway 47 Conservation Area	12.4609
60150	Makaranui Gravel Reserve	0.4157
60152	Conway Street Conservation Area	
60158	Mangateitei Stream Marginal Strip	2.0000
60160	Poutu River Marginal Strip	17.3000
60165	Mangawhero River Marginal Strip	
60167	Ohakune Domain Recreation Reserve	6.3156
60169	Jubilee Park Scenic Reserve	
60173	Mangawhero River No.2 Marginal Strip	0.2370

### **4.5.5** Values

### (a) Physical Landscape

The mighty, active volcanoes of Tongariro National Park are the focus of Tongariro-Ruapehu. These snow-capped peaks, with nearby Lake Taupo in the foreground, form the basis of thousands of visitor experiences in this region each year.

Natural processes such as volcanic eruption, glaciation and fire, combined with human-induced changes, have created a mosaic of forests, tussockland, barren deserts, boulderfields and gravelfields.

Two of the North Island's major rivers, the Waikato and Whanganui, have their sources in the peaks of Tongariro National Park.

Much of the mantle of vegetation has been removed from the eastern flanks of Mount Ruapehu by erosion initiated by human intervention, forming the Rangipo Desert with its lava flows, multi-layered ash formations and alpine plants. Westerly winds funnel off the peaks, pick up sand and accelerate it across the plains to sandblast the landscape.

### (b) Geopreservation

To date, more than 60 geopreservation sites have been classified for Tongariro-Ruapehu, representing one-third of all geopreservation sites classified in the conservancy. The quantity is due mainly to the large number of features and eruption products described on the well-preserved and studied active volcanoes.

Sixteen of the sites are classed as internationally important, consistent with the World Heritage listing for Tongariro National Park. Only two (Ketetahi geothermal field and hot springs which are owned by Ngati Tuwharetoa) are regarded as vulnerable to human disturbance but are not currently under any known threat. One, Ruapehu Crater Lake, which is the most accessible of the few hot crater lakes in glacial settings worldwide, is vulnerable to natural disturbance. Thirty-four sites are classed as nationally important but only one (Tangiwai rail disaster site) is regarded as vulnerable to human interference (road realignment). Three sites at the Ohakune craters (north-west of the township) and the Rangataua lava flow (south of the township) may become vulnerable due to further quarrying as they are on private land.

### (c) Flora

Plants considered priority species for protection in Tongariro-Ruapehu (see appendix 4) are:

• Alepis flavida - semi-parasitic yellow mistletoe which was recently rediscovered after not having been seen since 1987;

- Peraxilla tetrapetala mistletoe which grows on mountain beech and is still present although under severe threat from possums. Present at Whakapapa and Ohakune;
- Peraxilla colensoi yellow or red mistletoe which grows on silver beech and seems less common and even more vulnerable than Peraxilla tetrapetala. Present in small numbers at Ohakune;
- Dactylanthus taylori vulnerable parasitic woodrose under threat from possums and collectors;
- Thismia rodwayi litter-dwelling plant which lives in a symbiotic association with a fungus. Occurs at Ketetahi, Hauhungatahi and Ohakune;
- *Prasophyllum aff patens* vulnerable orchid which occurs in two wetlands, one of which is on private land;
- Pterostylis micromega vulnerable orchid, again in two wetlands;
- Pterostylis 'linearis' endangered orchid present in one wetland;
- Carex uncifolia threatened sedge reported on the top of Hauhungatahi.

### Important plant communities include:

- wetlands including flax-monoao communities, peat bogs, tarns and alpine soaks;
- kaikawaka-pink pine associations;
- rata-podocarp-kamahi forest near Ohakune;
- kahikatea grove on shores of Lake Rotopounamu;
- hard tussock-blue tussock clearings on the north-eastern slopes of Tongariro;
- ribbonwood grove at the foot of Tihia;
- kowhai groves at the foot of Tihia;
- beech forest communities of Tihia, Pihanga, Kakaramea;
- tall podocarp forest of Kakaramea.

### (d) Fauna

Wildlife in Tongariro-Ruapehu considered priority species for protection (see appendix 3) are:

• North Island brown kiwi - isolated populations and/or individuals present although evidence suggests numbers are low and declining;

- North Island kaka widely distributed along southern and western slopes of Ruapehu in low numbers;
- New Zealand falcon widely distributed in low numbers throughout;
- kereru (New Zealand pigeon) widely distributed in low numbers wherever suitable forest habitat occurs;
- banded dotterel common on lower altitude scree slopes during summer breeding season;
- blue duck significant numbers in south-western catchments of Mount Ruapehu;
- yellow crowned parakeet widely distributed where suitable tall forest exists;
- long-tailed bat widely distributed in low numbers;
- short-tailed bat major population rediscovered in 1993/94;
- native fish rivers within Wanganui catchment contain koaro. Lake Rotopounamu also contains koaro. These are threatened by introduced smelt which have been released (source unknown) into the lake.

Tongariro-Ruapehu provides habitat for a variety of more common birds, invertebrates, lizards and introduced wildlife.

### (e) **History**

Tongariro National Park has been a very important place for the development of nature conservation and recreation tourism and contains some key historic places relating to those activities. Old Waihohonu Hut, Glacier Hut, The Grand Chateau and possibly some of its ancillary buildings are examples.

The peaks of mounts Tongariro, Ngauruhoe and Ruapehu are sacred to local iwi and have always played a significant part in their lives. The only key Maori historic reserve known and managed at present is Opataka.

Evidence of the timber milling that occurred around the southern, western and northern fringes of the park includes the bush tramways at Makatote and Ketetahi and the staircase and dam near Ohakune.

Historic transport systems are evidenced by an old wooden bridge on an early alignment of the Desert Road near Waihohonu Stream, old coach roads through the park (now for much of their length managed as tramping tracks) and the Hapuawhenua Viaduct (part of the main trunk railway).

### 4.5.6 Threats

The major conservation threats in Tongariro-Ruapehu remain animal pests (browsers and predators), introduced plants (particularly *Pinus contorta*, heather (*Calluna vulgaris*) and broom (*Cytisus scoparius*), fire and human development (particularly in the alpine zone).

All forest and scrub associations support varying densities of red deer and, to the east, sika deer. Recreational hunting maintains numbers at fairly low levels but deer continue to be a threat.

Goats have escaped into the park at several locations in recent years. These have been eradicated but continued vigilance is essential.

Pigs have become established in localised areas within Tongariro National Park.

Fencing is a major issue on the south-western boundary of Tongariro-Ruapehu. Cattle farming is the predominant neighbouring land use and stray stock result in considerable damage to forest. Most of the boundary is currently fenced but ongoing maintenance is required.

Hares extensively inhabit the tussock and alpine plant associations. Possums are generally found in low densities throughout and have been responsible for serious declines of several mistletoe species. At lower altitude, where their numbers are higher, possums are responsible for major kamahi defoliation. Currently the department's possum control in Tongariro-Ruapehu is restricted to limited mistletoe protection. Commercial control is the only action available in most habitats.

Rats, cats, mustelids and dogs all pose significant predatory threats to wildlife. The department's ability to manage these threats is limited but the National Parks Act 1980 prohibits dogs within national parks.

*Pinus contorta* is a major threat to all regenerating and low-growing communities in Tongariro-Ruapehu. It grows well here and could, if unchecked, totally change the ecological character of the national park and the adjacent wetlands.

Scottish heather (*Calluna vulgaris*) is also a very serious threat to all low-growing communities above the tree line and to peat bogs. It has been suggested that heather prevents long-term succession in lower altitude tussock areas which were once forested but this has not yet been confirmed.

Broom (*Cytisus scoparius*) threatens tussockland and wetland margins but generally will be overtopped by native trees. It has a visual effect, however, looking totally out of place in tussock-monoao country.

Cotoneaster and barberry (*Berberis*) may threaten indigenous regeneration in forest. Both are shade-tolerant and replace natural understorey plants.

Orchids and woodrose (*Dactylanthus taylorii*) are threatened by collectors.

As in Kaimanawa-Moawhango, scrub and tussock associations below 1,250 metres in

Tongariro National Park have developed as a result of volcanic activity and human fires.

Human use of the alpine zones is a potential threat to the fragile ecosystem and to cultural values of iwi and may lead to conflict between visitors.

It is likely that many key historic resources in Tongariro-Ruapehu have not yet been identified. This is a threat to their preservation. Without knowledge of their existence and significance, development (e.g., for roading, residential, industrial, agricultural, tourism and recreation purposes) may destroy or compromise their continued existence and value.

The department will advocate against the adverse effects of development. These effects may include degradation of aquatic ecosystems in their natural state or clearance of indigenous vegetation and the subsequent loss of biodiversity. Examples of activities that have impacted on natural resources in this way include clearance of native vegetation for forest production, hydroelectric development, roading, stormwater concentration, de-icing chemicals and loss of landscape values through ad hoc infrastructure development. The department works with the organisations involved to achieve the best possible environmental outcomes. Input may include advising on project implementation or working through statutory planning processes where there are significant environmental effects unable to be mitigated.

### 4.5.7 Public Use

In terms of the conservancy's recreation opportunities, Tongariro-Ruapehu contains a complex mix of rural, accessible backcountry and remote opportunities. Tongariro National Park, as the largest contiguous protected land area, is mostly remote but includes higher use backcountry fringes and corridors containing the popular tramping tracks and the ski areas. For this reason Tongariro-Ruapehu and Tongariro National Park in particular are not as significant as the Kaimanawa-Moawhango in terms of providing remote recreation experiences. Because Tongariro National Park is readily accessible by road it is an extremely popular backcountry recreation area, enhanced by its volcanic features, alpine attractions and alpine activity opportunities. Tramping occurs mostly in the basin containing lakes Rotoaira and Otamangakau and around Ohakune and Waiouru.

Facilities are concentrated along State Highway 48 (Bruce Road) and at Whakapapa village, the Ohakune Mountain Road and along the two circuitous tramping tracks (Tongariro Northern Circuit and Round-the-Mountain Track). There are minimal facilities along State Highway 1.

In a busy year about 850,000 visitors come to Tongariro National Park. Absolute numbers depend mainly on the nature of the ski season. Skiers are the majority group and their activities focus on the two main ski areas - Whakapapa and Turoa. Other primary activities are sightseeing, short walks, overnight tramping trips, and camping.

Issues within Tongariro National Park relate to high visitor use and can be summarised as:

- demand for car parks at ski areas;
- need to improve sewage treatment and disposal at Iwikau village and Turoa ski area;
- limited remaining capacity for Whakapapa sewage treatment system;
- demand for toilet facilities at roadends and on popular walking tracks;
- limitations for quality experience at tramping huts;
- erosion of popular tramping tracks;
- demand for activities which are incompatible with the national park concept;
- development within alpine areas.

The main visitor seasons for Tongariro National Park are from July to late-October (the ski season) and mid-December to mid-February (summer vacation period) with the peak periods being August and December, January and Easter. There is a decline in visitor numbers during autumn and late spring. At times of highest use, congestion and related impacts on the natural values of Tongariro National Park are greatest.

The pressure of visitor use arises partly because the Tongariro National Park is surrounded by a developed landscape and state highways. The park is the key area for alpine recreation in the North Island and the natural volcanic landscape is an attraction in itself. Growth of visitor numbers and activities, and associated tourism industry demands, will be a major management issue in the future. The department will support transport operators and systems which reduce physical impacts on the environment. It may, in places, set limits on vehicle numbers to stop overcrowding at popular tourist sites.

Areas receiving high use and having the greatest recreation significance in Tongariro-Ruapehu are (in no particular order):

- Whakapapa ski area;
- Turoa ski area;
- Whakapapa village/State Highway 48 (Bruce Road) access corridor;
- Ohakune Mountain Road access corridor;
- Tongariro Crossing, Tongariro Northern Circuit (track, huts and entrance areas);
- Lake Rotopounamu;
- Lake Otamangakau.

Lake Otamangakau is an increasingly popular site for anglers and has a reputation for spectacular trophy fish. Issues facing recreation management here include the threats to fishery through overuse, land use practices on surrounding private land and management of the lake levels for hydro generation purposes.

Further issues in Tongariro-Ruapehu are the lack of visitor facilities along the State Highway 1 (Desert Road) fringe, facilities which would introduce travellers to the unique features of the eastern portion of Tongariro National Park; the possibility of enhancing the range of recreation opportunities close to the Ohakune community; the potential for public access issues in the Waihohonu area and on access roads over private Maori land east of State Highway 1 to the Kaimanawa Forest Park.

## 4.5.8 Research, Ecological Survey and Monitoring

Research, ecological survey and monitoring carried out by the department focuses on natural and historic resources. Recreation impacts and the need to assess the effectiveness of management of these resources is critical. The land inventory sheet for each site administered by the department identifies the specific survey and monitoring being undertaken. The priorities for these sites are determined by the general criteria outlined in 3.1.7 of this document.

# 4.5.9 Areas of High Value Not Administered by the Department

Tongariro-Ruapehu contains many different vegetation types, contributing significantly to regional biodiversity, particularly in the lower altitude areas which tend not to be administered by the department. These include:

- peat bogs adjacent to lakes Otamangakau and Rotoaira. These wetlands are extensive, in very good condition and support a mosaic of different bog vegetation types;
- Kakaramea, particularly the wetland area near the summit;
- areas of kanuka forest to the north and east of Tongariro. These are threatened by firewood seekers;
- areas of permanent red tussock and tangle fern peat bog at Rangipo North. This
  type is not well represented on public conservation land;
- desert plant communities at Rangipo;
- regenerating forest on the lower western slopes of Pihanga and above Lake Rotoaira;
- peat bog in Winstone's block at Tangiwai. This area is now fenced to protect its natural resources from stock;

- tussock on farmland west of Waiouru;
- Lake Otamangakau, Lake Rotoaira and parts of the upper Whanganui River system remain unprotected by mechanisms contained within the Conservation and Reserves acts.

# 4.5.10 Management Objectives

The following objectives must be read in conjunction with the principles, objectives and implementation provisions contained in parts II and III. Together these components are the key determinants in decision making.

- To achieve an integrated approach to protect the natural and historic values of all land in Tongariro-Ruapehu, regardless of tenure, in co-operation with other landowners and local authorities.
- 2 To manage the pristine zone of Tongariro/Ruapehu giving due priority to its inherent cultural and intrinsic values.
- To achieve, through advocacy, greater protection of areas and habitats of high natural and historic value on private land, firstly through liaison and co-operation with other landowners and secondly through statutory planning processes.
- 4 To manage Tongariro National Park in accordance with the Tongariro National Park Management Plan.
- To control plant pests, including heather (*Calluna vulgaris*), and to eliminate *Pinus contorta*.
- 6 To protect the soil and water conservation values of other areas, by (a) advocating the protection of riparian vegetation, and (b) advocating the protection of remaining forested catchments through statutory and non-statutory processes.
- Where privately owned land adjoining Tongariro National Park is for sale, to consider the appropriateness of its addition to the national park.
- To continue the management of the Karioi Rahui on the flanks of Mt Ruapehu, to provide for the integrated management of natural resources utilising expertise of Ngati Rangi and the broader Ruapehu District community.
- 9 To develop and maintain a land-based integrated sewage treatment system for the Whakapapa and Iwikau villages.
- 10 To remove the exotic plantation forest from within Tongariro National Park.
- 11 To undertake surveys and research to gain a better understanding and knowledge of natural and historic values on and off public conservation land.

# 4.6 Place - Plateau Forests

#### 4.6.1 Introduction

The forest lands that circle the north-west side of the volcanic plateau are valued for their biological diversity. There has been an increasing focus on Tongariro Forest. Many endangered species are found here and, where conservation threats are removed, species like the blue duck are thriving on the river's flow through this area. There is also an increasing awareness of the scope for multiple use of this area by recreational visitors.

The department manages 30 sites within Plateau Forests covering 37,524 hectares (see *Plateau Forests* map). The department administers 20 conservation covenants in this place. There are no conservation management plans for sites within Plateau Forests.

# 4.6.2 Physical Description

#### (a) Topography and Geology

The Tongariro and Erua forests border Tongariro National Park to the north and west. Altitudes range from about 400 metres in the Whanganui River and

Retaruke River to 811 metres in Erua Forest and 1,076 metres in Tongariro Forest.

The main landforms are the lahar ring plain surrounding the Tongariro volcanoes, fault scarps and the moderately steep hillcountry of the headwaters of the Whanganui River which drains from the ring plain. River valleys are steeper and narrower in the south-west, in the ring plain and along the scarps. These scarps are up to 330 metres high and are down-thrown towards the volcanoes.

The predominant rock types are coarse andesitic lahar material on the ring plain and a variety of Tertiary and Mesozoic sedimentary rocks in the hillcountry. Greywacke, argillite and limestones of upper Jurassic age feature in the north and Pliocene mudstones and sandstones dominate in the south. These are overlain by young volcanic ash, Taupo Pumice and alluvial material (often pumice). Soils are mainly yellow-brown pumice and loams, podzolised in many places.

#### (b) Climate

The area lies within the cool temperate (montane) bioclimatic zone with relatively warm summers (January mean 14-17°C). Winters are cool (July mean 4-6°C) with seasonal snowfalls most years which lie for several days at higher elevations.

Annual rainfall of 1,600 to 2,800 millimetres is distributed relatively evenly throughout the year. Winter is the wettest season but spring also has a high number of rainy days. Rainfall can be heavy and prolonged. Summer and autumn are both relatively dry seasons although summer is the most variable.

Winds are predominantly from the westerly quarter. Southerlies are frequent during winter. The area is between 70 and 100 kilometres from the sea in these directions and thus has a moderate marine influence.

#### (c) Vegetation

Plateau Forests includes parts of three ecological districts: Tongariro, Taumarunui and Matemateaonga. It includes Tongariro, Pukepoto and Erua forests as well as some outlying reserves to the north.

In the past, except for wetlands in poorly-drained basins, this whole area was forested. Some parts, particularly just north of Tongariro National Park, were cleared and burnt for farming. Exotic pines have now been planted in some of these areas. The remainder has been logged except for patches set aside as ecological areas which protect representative examples of forest and wetland. The logged areas are in various stages of regeneration, some very advanced.

The forest cover is varied kaikawaka in wetter, cooler places and Hall's totara and mixed podocarp, rata-podocarp and tawa-podocarp in warmer, lower altitude areas. Regenerating forests comprise mainly kamahi and broadleaved species.

There are a number of wetlands in Plateau Forests. These are generally peat bogs - some with cabbage trees or kaikawaka, others with sedges, rushes and tangle fern. The flax-monoao wetlands in Tongariro National Park extend into this place at Erua.

#### (d) Native Fauna

Despite human intervention in natural processes which have occurred in Plateau Forests over the past century much original wildlife has survived. Plateau Forests contains some of the most important lowland habitats in the conservancy for many of our more threatened species.

The small, less modified stands of lowland forest scattered throughout this place, together with the extensive montane and alpine habitats of neighbouring Tongariro National Park, are vital for the continued existence of many species.

#### (e) Animal Pests

Red deer occur throughout Plateau Forests and, to date, intense hunting pressure has generally maintained numbers at low levels. Higher population densities occur only where hunting access is difficult. Red deer trophies from Plateau Forests are outstanding and highly sought after.

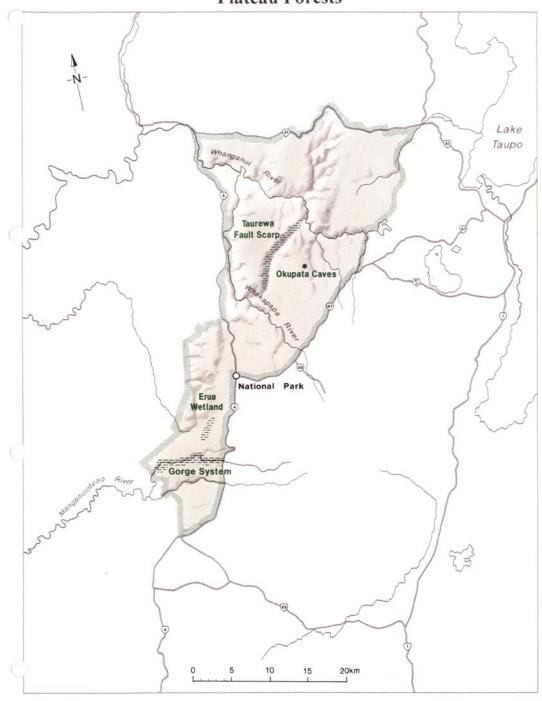
Goats are widely distributed but have yet to extend their range east of the Waione Stream within Tongariro Forest. Eradication is not possible because of constant reinvasion of semi-domestic goats from adjoining farmland but control operations have heavily reduced goat numbers on public conservation land.

Pigs occur in isolated pockets but are not present in Erua Forest south of the Makatote River.

Possums occur throughout Plateau Forests in generally high densities. Rats, cats, mustelids and hedgehogs are also widespread.

Domestic cattle often stray from adjoining farms onto public conservation land.

# **Plateau Forests**





### 4.6.3 History

Plateau Forests sits on the boundary of the Tuwharetoa and Whanganui people. Archaeological evidence shows that widespread settlement occurred around Lake Otamangakau and south toward Te Porere Redoubt. The concentration of Maori resources toward the northern end of Plateau Forests and Ohakune is thought to be the result of topography, seasonal availability of resources and social and political dimensions such as warfare between tribes. There is little archaeological evidence of Maori settlement in the southern part of the Tongariro and Erua forests although there are numerous Maori place names adjacent to and within this place. The strong Maori traditional links between the sacred peaks of the central North Island and the Whanganui River meant that Plateau Forests provided many travel routes between the two regions.

Te Porere Redoubt is the site of the last substantial conflict of these wars and of Te Kooti's last stand in a prepared position.

Extractive land uses have dominated the recent history of Plateau Forests especially since construction of the main trunk railway in 1908.

Between 1903 and 1978 Tongariro Forest supported an indigenous timber logging industry. It began with a concession granted to W H and E Grace, who later formed the Egmont Box Company, gaining leases over an area totalling 7,588 hectares by 1920. This led to the establishment of a mill at Taurewa. Several other companies sublet cutting rights from the Egmont Box Company for operation in the Taurewa Block. These included the Ketetahi Timber Milling Company, the Dominion Timber Company and the Pokaka Timber Company. Other companies worked in the Owhango and Raurimu areas.

Indigenous logging was carried out in the Erua region between 1935 and 1977. As in Tongariro-Ruapehu, a number of communities evolved to service the sawmilling industry.

In 1956 timber cutting rights reverted to the Crown and the sale of the remaining timber came under the control of the New Zealand Forest Service until logging ceased in the early 1970s.

From the late 1930s blocks of exotic forest were established within the Tongariro and Erua areas. These contained species such as black pine (*Pinus nigra*), *Pinus contorta*, western red cedar (*Thuja plicata*), *Pinus ponderosa*, Douglas fir (*Pseudotsuga menziesii*), Lawson's cypress (*Chamaecyparis lawsoniana*), Japanese cedar (*Cryptomeria japonica*), macrocarpa (*Cupressus macrocarpa*), and a variety of eucalyptus species.

# 4.6.4 Public Conservation Land

There are some 37,524.723 hectares of reserves and conservation areas in Plateau Forests.

Land Inventory Number	Name	Area (hectares)
60001	Hukapapa Conservation Area	18.7164
60002	Waimarino Scientific Reserve	228.1334
60013	Pokaka Scenic Reserve	91.3091
60017	Manga Te Puhi Scenic Reserve	81.3418
60018	Raurimu Scenic Reserve	53.5196
60019	Whakapapa Island Scenic Reserve	61.5121
60021	Whakapapa Gorge Scenic Reserve	81.1673
60022	Ohinetonga Scenic Reserve	144.6259
60023	Raurimu Spiral Scenic Reserve	71.0420
60042	Tongariro Forest Conservation Area	21,470.7746
60097	Erua Conservation Area	11,060.0128
60106	Otamarautara Stream Scenic Reserve	563.5700
60123	Makatote Scenic Reserve	100.2450
60124	Erua Recreation Reserve	4.0469
60129	Pukepoto Ecological Area	1,906.1908
60130	Waituhi-Kuratau Scenic Reserve	1,318.9445
60136	National Park Sections Conservation Area	2.3399
60144	Te Porere Pa Historic Reserve	58.2711
60148	Town of Erua Conservation Area	12.4835
60154	Moturoa Conservation Area	12.3454
60155	Whakapapa River Marginal Strip	99.6840
60156	Te Pure Stream Marginal Strip	0.8000
60157	Makotuku River Marginal Strip	18.7000
60168	Owhango Domain Recreation Reserve	6.5329
60170	Owhango Hall Recreation Reserve	0.1012
60171	Burnand Road Marginal Strip	1.1200
60172	Kakahi Marginal Strip	0.8550
60176	Raurimu Library Local Purpose Reserve	0.676
60178	Manganuioteao Scenic Reserve	54.6325
60179	Ohinetonga Marginal Strip	1.0370

## Covenants

There are 20 conservation covenants in Plateau Forests pursuant to the Reserves Act 1977.

Covenant	Name	Area
		(hectares)
Covenant 7	Taurewa Station 'P'	6.0195
Covenant 8	Taurewa Station 'O'	12.3210
Covenant 9	Taurewa Station 'N'	3.6660
Covenant 10	Taurewa Station 'M'	15.3990
Covenant 11	Taurewa Station 'L'	2.7535
Covenant 12	Taurewa Station 'K'	34.9080
Covenant 13	Taurewa Station 'H'	8.3170
Covenant 14	Taurewa Station 'G'	2.0920
Covenant 15	Taurewa Station 'F'	17.6235
Covenant 16	Raurimu Station 'W'	44.0490
Covenant 17	Raurimu Station 'V'	1.5450
Covenant 18	Raurimu Station 'U'	1.6830
Covenant 19	Raurimu Station 'T'	0.4947
Covenant 20	Raurimu Station 'S'	4.0640
Covenant 21	Raurimu Station 'R'	2.7490
Covenant 22	Raurimu Station 'P'	2.4260
Covenant 23	Raurimu Station 'M'	17.5600
Covenant 24	Raurimu Station 'L'	7.6200
Covenant 25	Raurimu Station 'K'	2.1600
Covenant 26	Raurimu Station 'H'	12.2290

#### **4.6.5** Values

#### (a) Physical Landscape

Plateau Forests is the most geologically diverse place in the conservancy. Tectonic uplifting, faulting, volcanic activity, sedimentary and fluvial deposition and erosion have produced an austere landscape.

The volcanic lahar ring plain flows outwards from the peaks within Tongariro National Park to be cut at its outer edge by the headwaters of many of the wild rivers that drain to the Whanganui River.

The deeply-eroded gorges and gullies which cross the landscape are often interrupted by huge escarpments and limestone outcrops.

On entering Plateau Forests there is a feeling of recovery. A landscape devastated by various attempts to tame it is still able to show its resilience.

#### (b) Geopreservation

Two sites have been classified to date. These are the road cutting through the Ruapehu ring plain at Makatote Gorge and an outcrop of Oligocene limestone on the eastern bank of the Whakapapa River east of Owhango. Both are classed as nationally important but neither is regarded as vulnerable to damage from humans. The Taurewa fault scarp, the highest exposed fault scarp in the region (260 metres), is worthy of inclusion in the earth deformation section of the inventory. All sites are on public conservation land.

#### (c) Flora

Plants considered priority species for protection in Plateau Forests (see appendix 4) are:

- Dactylanthus taylori vulnerable parasitic woodrose, under threat from possums and collectors, present in several places;
- *Prasophyllum aff patens* vulnerable orchid present in two wetlands;
- Pterostylis 'linearis' endangered orchid present in two wetlands;
- Pittosporum turneri vulnerable shrub which occurs on private land at
  Otamangakau, and on public conservation land at Kapoors Road and
  Erua. The Erua population is the largest known population of this
  species, which grows in only a few places outside the conservancy;
- Thismia rodwayi small litter-dwelling plant which has a symbiotic relationship with a fungus grows at Te Porere and Ohinetonga;
- Coprosma wallii, Olearia capillaris, Melicytus 'flexiose', Ranunculus ternatifolius a suite of plants with localised and restricted distribution growing at Erua.

Important plant communities include:

- wetlands at Taurewa, Kapoors Road, National Park and Erua;
- kaikawaka forests at Kapoors Road and National Park;
- *Pittosporum turneri* and other locally important plant species making up a very unusual and significant community in the Erua sanctuary;
- rata-podocarp and rata-tawa forest at Hukapapa and in the Mangamingi Ecological Area at southern Erua;
- beech remnants at Raurimu, along the base of the scarp at Erua and at Middle Road (upper Wanganui);
- tawa forest at its upper altitudinal limits in the Tapapakurua Ecological Area and at Owhango;
- kahikatea-matai grove on river flat at Owhango;
- Gunnera and Jovellana community at base of waterfall at Tapapakurua;
- mixed podocarp forest of Maungakatote.

#### (d) Fauna

Wildlife in Plateau Forests considered priority species for protection (see appendix 3) are:

- North Island brown kiwi Tongariro Forest contains one of the largest populations in the central North Island. Significant numbers also remain in Erua Forest;
- North Island kaka widely distributed in low numbers;
- New Zealand falcon widely distributed in low numbers;
- kereru (New Zealand pigeon) widely distributed;
- blue duck significant numbers throughout catchments of both forests;
- yellow crowned parakeet widely distributed in less modified habitat;
- long-tailed bat widely distributed in low numbers;
- short-tailed bat numerous past records but current distribution unknown;
- native fish both koaro and banded kokopu present. Numbers and distribution unknown.

Plateau Forests provides habitat for a variety of more common birds, invertebrates, lizards and introduced wildlife.

#### (e) History

No comprehensive field inventory has been undertaken in Plateau Forests and it is likely that there are more key historic resources than those known and managed at present. Te Porere is the most significant of the key resources currently managed. It is one of the most accessible, best defined, and best known of the many redoubts built during the New Zealand wars.

Mill sites are still evident at Taurewa and Pokaka but there are few remnant structures and machinery. A loggers' hut of kaikawaka slab construction still stands in Tongariro Forest near Raurimu and there are examples of remnant tramlines and road cuttings. A steam shovel stands on private land near to the road cuttings it constructed on Pukehinau Road.

#### 4.6.6 Threats

Animal pests are one of the biggest threats to the recovery of Plateau Forests.

Goats occur extensively throughout this place and although their numbers have been heavily reduced and maintained at low numbers by departmental operations since 1989, continued efforts are important, especially where forest regeneration is beginning to show improvement.

Recreational hunting plays an important role in controlling goats as well as red deer and pigs which both occur in low numbers. Fencing is a major issue in Plateau Forests as cattle farming is the predominant neighbouring land use. Straying stock cause serious damage. Large boundaries with both Tongariro and Erua forests remain unfenced and maintenance of existing fencelines involves a considerable commitment.

Possum densities are high within lowland areas of Plateau Forests. Possums cause much damage to the vegetation, particularly woodrose (*Dactylanthus taylorii*) and northern rata. The presence of Bovine tuberculosis means regional councils undertake considerable possum control on boundary areas but the department must rely on commercial control in other areas.

Rats, cats, mustelids and dogs all pose significant predatory threats to wildlife in the area but the department's ability to manage these is extremely limited. The establishment of dog-free areas in Tongariro Forest to protect kiwi is an important management option.

Continued logging of remaining indigenous forest on private land is a significant threat to natural values. The department works closely with landowners on this issue and makes submissions through statutory planning processes on applications to remove significant indigenous vegetation.

*Pinus contorta* invades disturbed areas and wetland margins, posing a serious threat to these areas and, as a seed source, to Tongariro National Park. There is a significant annual programme and long-term strategy to eradicate *Pinus contorta* from the conservancy.

Heather (Calluna vulgaris) is also a threat to peat bogs.

Collectors threaten woodrose (Dactylanthus taylorii) and orchids.

Increasing recreation use of Plateau Forests has the potential for disturbance of important habitats and therefore needs to be monitored carefully.

It is likely that many key historic resources in Plateau Forests have not yet been identified. This is a threat to their preservation. Without knowledge of their existence and significance, development (e.g., for roading, residential, agricultural, industrial, tourism and recreation purposes) may destroy or compromise their continued existence or value. The department seeks to identify these resources.

The department will advocate against the adverse effects of development. These effects may include degradation of aquatic ecosystems in their natural state or clearance of indigenous vegetation and the subsequent loss of biodiversity. Examples of activities that have impacted on natural resources in this way include clearance of native vegetation for forest production and hydroelectric development. The department works with the organisations involved to help achieve the best possible environmental outcomes. Input may include advising on project implementation or, where there are significant environmental effects unable to be mitigated, working through statutory planning processes.

#### 4.6.7 Public Use

Public use of Plateau Forests is, in terms of dominant activities and levels of use, quite different to that of Tongariro-Ruapehu and Taupo Basin.

Plateau Forests has provided the conservancy's largest contiguous backcountry area for off-road vehicle use, trail bikes, horses and mountain bikes. This has been modified periodically as the significant natural values of Tongariro Forest have been researched and acknowledged. A mix of recreation uses still provides for a wide cross-section of the community without compromising natural values.

There is a remote area within the south-western section of the Taurewa Ridge in Tongariro Forest Conservation Area, in which there are no maintained tracks or roads (see appendix 5).

Within the larger forest areas (Tongariro, Erua and Rangataua) roads are the predominant infrastructure, including roads maintained to two-wheel-drive/car standard and rough tracks suitable only for motorbikes or mountain bikes. The road network is a legacy of past logging operations in these areas. (See *Roads and Tracks in Tongariro Forest*, appendix 5.) Use is concentrated at features of interest accessed by these roads, in particular the Okupata Cave system in Tongariro Forest. Okupata is the most significant known cave system in the conservancy. The caves receive high visitor use.

Walking and tramping opportunities are limited, the most significant being the access to Te Porere Historic Reserve and at Ohinetonga Scenic Reserve adjacent to Owhango.

A feature of Plateau Forests is its value to local communities for traditional recreation uses such as hunting and horse trekking. Activities such as mountain biking have grown significantly in recent years. Mountain biking occurs in high volume on the 42 Traverse in Tongariro Forest in particular.

The presence of the Sir Edmund Hillary Outdoor Pursuits Centre of New Zealand (under a lease agreement) within Tongariro Forest Conservation Area contributes to a steady use of Plateau Forests.

The Whakapapa and Whanganui rivers and Waimarino Stream provide significant trout fishing opportunities. The Whakapapa and Whanganui also provide rafting/kayaking and tubing opportunities. The quality of these activities is affected by use of the waterways for hydroelectricity generation. The deep gorges of tributary rivers such as the Manganuioteao and Mangatepopo also provide water-based recreational opportunities.

# 4.6.8 Research, Ecological Survey and Monitoring

Research, ecological survey and monitoring carried out by the department focuses on natural and historic resources. Recreation impacts and the need to assess the effectiveness of management of these resources is critical. The land inventory sheet for each site administered by the department identifies the specific survey and monitoring being undertaken. The priorities for these sites are determined by the general criteria outlined in 3.1.7 of this document.

# 4.6.9 Areas of High Value Not Administered by the Department

Surveys will be undertaken with the co-operation of landowners to provide a full inventory of areas of high natural and historic values not administered by the department.

The wetlands at Taurewa are under threat from grazing and drainage.

# 4.6.10 Management Objectives

The following objectives must be read in conjunction with the principles, objectives and implementation provisions contained in parts II and III. Together these components are the key determinants in decision making.

- To achieve an integrated approach to protect the natural and historic values of all land in Plateau Forests, regardless of tenure, in co-operation with other landowners and local authorities.
- To achieve, through advocacy, greater protection of areas and habitats of high natural and historic value on private land, firstly through liaison and co-operation with other landowners and secondly through statutory planning processes.
- 3 To encourage and facilitate a diverse range of recreation use, where recreation activities do not conflict with each other unnecessarily, experiences are not degraded by overuse of the environment and facilities, and use does not unacceptably affect natural and historic values.
- 4 To achieve the cessation of native forest logging and the modification of significant native vegetation through advocacy and through statutory and non-statutory processes.
- To make submissions through statutory processes on applications to log indigenous forest and/or to remove significant indigenous vegetation.
- To oppose developments such as hydroelectric development, mining and mineral extraction which have potential to adversely affect rivers and their catchments.
- 7 To achieve, through advocacy, the return of water flows to their original catchments where practicable.
- 8 To provide a range of vehicle access opportunities in the Tongariro, Erua and Rangataua areas, from well maintained two-wheel-drive roads through to tracks and routes for mountain biking or horse trekking, where these activities do not compromise natural values or the experiences of visitors.
- 9 To monitor the growth of use in Tongariro Forest Conservation Area in order to determine if separation of different uses is necessary for the satisfaction and safety of visitors.
- 10 To investigate the need for further designated camping sites with basic amenities (including water supply, toilets, landscaping).
- To provide no further recreation infrastructure in the established ecological areas and in the remote areas, or in any other areas deemed to have significant ecological values as knowledge increases.
- 12 To manage recreational use of waterways which are important blue duck habitat through mechanisms such as agreed seasonal restrictions on various activities as

- a result of public consultation.
- To encourage and facilitate participation by local communities in management and conservation initiatives.
- To protect fauna on a prioritised basis, according highest priority to managing threatened species and the sites essential for survival of these species.
- To protect the soil and water conservation values of areas managed by the department, primarily by animal pest control, fire prevention and fencing where appropriate.
- To manage freshwater fish species and their habitats. To monitor statutory processes to ensure compliance with the provisions of the Manganuioteao Conservation Order.
- 17 To undertake general surveys to complete cultural and physical inventories for Plateau Forests.
- 18 To remove exotic timber species from the Tongariro and Erua forests and undertake restoration as appropriate.
- 19 To undertake survey and research to gain a better understanding and knowledge of natural and historic values on and off public conservation land.
- 20 Upon completion of Treaty of Waitangi issues, to seek the gazettal of Tongariro and Erua forests as conservation parks.
- To prepare a conservation management plan for Tongariro Forest. Although awaiting the outcome of Treaty of Waitangi claims over the site, it may be possible to complete this process utilising the plan as a guideline.

# 4.7 Land Inventory Index

(Note: see appendix 8 for Land Inventory Index in alphabetical order.)

60001	Hukapapa Conservation Area
60002	Waimarino Scientific Reserve
60003	Matapuna Road Conservation Area
60004	Manganuioteao Conservation Area
60005	Taupo Landing Recreation Reserve
60006	Taonui Conservation Area
60007	Ohakune Field Centre Conservation Area
60008	Hospital Conservation Area
60009	Tawhero Conservation Area
60010	Kiokio Conservation Area
60011	Tongariro National Park
60011/1	Pihanga Block National Park
60011/2	Te Tatau Pounamu Wilderness Area National Park
60011/3	Tongariro National Park
60011/4	Rangipo National Park
60011/5	Ruapehu Pristine Alpine Zone National Park
60011/6	Skifield/Village Areas National Park
60011/7	Hauhungatahi Wilderness Area National Park
60011/8	Ohakune National Park
60011/10	Mangawhero Lowland Forest National Park
60012	Waingakia Stream Conservation Area
60013	Pokaka Scenic Reserve
60014	Horopito West Scenic Reserve
60015	Rangataua Scenic Reserve
60016	Mangaehuehu Scenic Reserve
60017	Manga Te Puhi Scenic Reserve
60018	Raurimu Scenic Reserve
60019	Whakapapa Island Scenic Reserve
60020	Rangataua No.2 Conservation Area
60021	Whakapapa Gorge Scenic Reserve
60022	Ohinetonga Scenic Reserve
60023	Raurimu Spiral Scenic Reserve
60024	Otamangakau Wetlands Conservation Area
60025	Mangamingi Stream Conservation Area
60026	Swamp Conservation Area
60027	Mangamutu Conservation Area
60028	Rotomoho Stream Conservation Area
60029	Stump Bay Conservation Area
60030	Tongariro River No. 2 Scenic Reserve
60032	Tongariro River Scenic Reserve
60033	Paurini Scenic Reserve
60034	Waikari Scenic Reserve
60035	Waikari Recreation Reserve
60036	Stump Bay Recreation Reserve
60037	Waimarino River Recreation Reserve
60038	Waiotaka Scenic Reserve
60039	Whakamaru Marginal Strip
60040	Okama Stream Marginal Strip
60042	Tongariro Forest Conservation Area
60042/1	Taurewa Ecological Area
60042/2	Otamawairua Conservation Area

600.40./2	
60042/3	Okupata Conservation Area
60042/4	Canyon Limestone Country Conservation Area
60042/5	Waipapaiti Conservation Area
60042/6A	Dominion Milled Forest Conservation Area
60042/6B	Okupata Milled Forest Conservation Area
60042/7	Piopiotea Conservation Area
60042/8	Whakapapa Conservation Area
60042/9	Forest blocks and pasture covenants Conservation Area
60042/10	Landcorp Pasture Conservation Area
60042/11	Pine Forest/ Rayonier Crown Lease Conservation Area
60044	Whakaipo Bay Scenic Reserve
60045	Whakaipo Bay Recreation Reserve
60046	Oruatua Conservation Area
60047	Pakuri Scenic Reserve
60048	Aratiatia Conservation Area
60049	Lake Rotokawa Conservation Area
60050	Waikato River Conservation Area
60051	Kaimanawa Forest Park
60051/1	Recreational Hunting Area Forest Park
60051/2	Tiraki Ecological Area
60051/3	Northern Kaimanawa Forest Park
60051/4	Waiotaka Ecological Area
60051/5	Ecology Stream Ecological Area
60051/6	Waipakihi Ecological Area
60051/7	Rangitikei Forest Park
60051/8	Central Kaimanawa Forest Park
60051/9	Southern Access Corridor Forest Park
60052 60053	Taupo Nursery Conservation Area
60054	Kawakawa Bay Conservation Area Waipahihi Stream Conservation Area
60055	Crown Park Recreation Reserve
60056	Wharewaka Conservation Area
60057	Kawakawa Bay Scenic Reserve
60058	Otaketake Stream Scenic Reserve
60059	Waihora Stream Scenic Reserve
60060	Tutaeuaua Scenic Reserve
60061	Kotukutuku Stream Scenic Reserve
60062	Hingarae Scenic Reserve
60063	Waihaha Scenic Reserve
60064	Waikino Scenic Reserve
60065	Te Hapua Bay Scenic Reserve
60066	Rangitukua Scenic Reserve
60067	Motuoapa Scenic Reserve
60068	Waitetoko Scenic Reserve
60069	Motutere Scenic Reserve
60070	Rangitaiki Conservation Area
60071	Hinemaiaia Scenic Reserve
60072	Rangatira Point Scenic Reserve (leasehold)
60073	Kaiapo Bay Scenic Reserve
60074	Opepe Bush Scenic and Historic Reserve
60075	Taupo Court House Historic Reserve
60076	Opawa Bush Scientific Reserve
60077	Huka Falls Scenic Reserve
60078	Kaahu Scenic Reserve
60079	Ngatamariki Hot Springs Scenic Reserve
60080	Opoto Scenic Reserve

60081	Tauhara Mountain Scenic Reserve
60082	Tirohanga Scenic Reserve
60083	Taupo Domain Recreation Reserve
	Awaroa Recreation Reserve
60084 60085	
	Rangataua Conservation Area
60086	Waipahihi Botanical Gardens Scenic Reserve
60087	Wharekawa Scenic Reserve
60088	Waitahanui Recreation Reserve
60089	Hatepe Recreation Reserve
60090	Delta Recreation Reserve
60092	Taupahi Scenic Reserve
60093	Omori Recreation Reserve
60094	Omori Scenic Reserve
60095	Gardiners Scenic Reserve
60096	Morunga Scenic Reserve
60097	Erua Conservation Area
60097/1	Erua North Milled Forest Conservation Area
60097/2	National Park Wetland Conservation Area
60097/3	Tapakura Ecological Area
60097/4	Erua Ecological Area
60097/5	Erua Exotic Forest Conservation Area
60097/6	Mangamingi Ecological Area
60097/7	Erua South Milled Forest Conservation Area
60098	Hura Scenic Reserve
60099	Waihi Road Recreation Reserve
60100	Waihi Scenic Reserve
60101	Oruatua Recreation Reserve
60102	Manowharangi Bay Recreation Reserve
60103	Mission Bay Recreation Reserve
60104	Kopokonui Stream Scenic Reserve
60105	Okaia Stream Scenic Reserve
60106	Otamarautara Stream Scenic Reserve
60107	Pihanga Scenic Reserve
60108	Tokaanu Stream Recreation Reserve
60109	Shaw Reach Conservation Area
60111	Spa Road Local Purpose Reserve
60114	Turangi Workshop Conservation Area
60116	Highway 47A Conservation Area
60117	Graces Road Conservation Area
60118	Waipapa Road Conservation Area
60121	Tokaanu Conservation Area
60122	Motuoapa Bay Recreation Reserve
60123	Makatote Scenic Reserve
60124	Erua Recreation Reserve
60125	Ohakune Lakes Scenic Reserve
60126	Makaranui Conservation Area
60127	Aratiatia Rapids Scenic Reserve
60128	Runanga Armed Constabulary Historic Reserve
60129	Pukepoto Ecological Area.
60130	Waituhi-Kuratau Scenic Reserve
60132	Tirohanga Recreation Reserve
60133	Pokuru Road Conservation Area
60134	Mangakowhiriwhiri Stream Conservation Area
60135	Whakamaru Conservation Area
60136	National Park Sections Conservation Area
60137	Five Mile Bay Recreation Reserve
	,

60138	Mine Bay Scenic Reserve (leasehold)
60139	Waipouwerawera Stream Conservation Area
60140	Broadlands Road Scenic Reserve
60141	
00141	Huka Falls (Left Bank) Crown Land, administered by
60141/1	the department
60141/1	Craters of the Moon Crown Land, administered by the
(0141/2	Alam Lahas Curang Land administrated by the
60141/2	Alum Lakes Crown Land, administered by the
601.42	department
60142	National Trout Centre
60143	Tokaanu Thermal Park and Maunganamu Recreation
604.44	Reserve
60144	Te Porere Pa Historic Reserve
60145	Omori Conservation Area
60146	Thames Street Conservation Area
60147	Mangateitei Road Conservation Area
60148	Town of Erua Conservation Area
60149	Highway 47 Conservation Area
60150	Makaranui Gravel Reserve
60151	Whangamata Stream Scenic Reserve
60152	Conway Street Conservation Area
60153	Whakaroa Point Recreation Reserve
60154	Moturoa Conservation Area
60155	Whakapapa River Marginal Strip
60156	Te Pure Stream Marginal Strip
60157	Makotuku River Marginal Strip
60158	Mangateitei Stream Marginal Strip
60159	Atiamuri Marginal Strip
60160	Poutu River Marginal Strip
60161	Te Anoputarua Point Marginal Strip
60162	Tongariro River Marginal Strip
60163	Shaw Reach Marginal Strip
60164	Waikato River Marginal Strip
60165	Mangawhero River Marginal Strip
60166	Aratiatia Rapids Recreation Reserve
60167	Ohakune Domain Recreation Reserve
60168	Owhango Domain Recreation Reserve
60169	Jubilee Park Scenic Reserve
60170	Owhango Hall Recreation Reserve
60171	Burnand Road Marginal Strip
60172	Kakahi Marginal Strip
60173	Mangawhero River No. 2 Marginal Strip
60175	Hatepe Recreation Reserve (amalgamated with 60089)
60176	Raurimu Library Local Purpose Reserve
60177	Tawera Street Gravel Reserve
60178	Manganuioteao Scenic Reserve
60179	Ohinetonga Marginal Strip
60180	Waitahanui River Mouth Conservation Area

Site Name: Hukapapa Conservation Unit No.: 60001

Status: Conservation Area

Area (ha):18.7164File Reference:RES 068Area Office:RuapehuMap Reference:\$19 162 359

Place: Plateau Forests Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Taumaranui

**Legal Description:** Part Section 6, Block VIII,

Kaitieke Survey District.

**Special Conservation** Small area of kahikatea forest.

Values:

Earth Data: Part of Whakapapa River valley system. Flat to gently rolling terraces.

Flora: Tawa-podocarp forest, kahikatea forest (small area), manuka scrub, toetoe-

broadleaved species scrub.

**Fauna:** Most common forest birds.

Fishery Values: Nil

Tangata Whenua Issues: Information held in the domain of Ngati Rangi.

**Historic Resources:** Timber milling, water supply source for main trunk line, disused quarry. Old

logging tramline.

Site Numbers Present: Nil

Recreation: Rural natural remnant.

Facilities: Nil

Animal Pests: Possums - bovine Tb endemic, stock trespass, mustelids.

Plant Pests: Blackberry around perimeter. Monkey musk (Minulus) in water-table at

entrance to old quarry. Ragwort (Senecio jacobaea). Refer Tongariro/Taupo

Problem Plant Strategy.

**Fences:** Fence repair and replacement 1996.

Access: State Highway 4.

Concessions: Nil
Other Issues: Nil

Management Priority: Control possum population.

Management Work Done: Regional council possom control.

Last Update: April 2000
Bibliography: Unknown

Value: Historic: 2 Conservation: 1 Recreation: 3

Site Name: Conservation Unit No.: Waimarino 60002

Status: Scientific Reserve

228.1334 File Reference: **RES 071** Area (ha): Area Office: Map Reference: S19 166 245 Ruapehu

Plateau Forests Place: Management Plan: No

**Local Authority:** Ruapehu District Council **Ecological District:** Tongariro

Legal Description: Section 18 Block XVI Kaitiaki

> Survey District, Section 12 Block XVI Kaitiaki Survey District, and part Section 8 Block XVI Kaitiaki Survey Part Waimarino District.

Block 4.

**Special Conservation** Only forest type on Ruapehu ring plain where beech is absent. Kaikawaka-

Values: podocarp associations. Woodrose (Dactylanthus taylori) likely.

Edge of volcanic ring plain. Outer margin Wanganui sediments podzolized Earth Data:

yellow/brown loam.

Flora: Kaikawaka-mountain toatoa forest. Mixed podocarp-broadleaved species

forest. Woodrose (*Dactylanthus taylori*) likely but not sighted recently.

Fauna: Most common forest birds. Seasonal use by kaka, kereru, kakariki, robin, NZ

falcon. Kiwi likely but not recorded. Long-tailed bat. Long-tailed shining

cuckoo.

Fishery Values: Eels, Galaxis species, brown trout, koura.

Tangata Whenua Issues: Information held in the domain of Ngati Rangi.

**Historic Resources:** Unknown Site Numbers Present:

Recreation: Hunting low. Backcountry drive-in 100%.

6272

Facilities: Road metalled through reserve (Fishers Track). Transmitter station and

associated access road. Old dam, National Park water supply.

**Animal Pests:** Possums - bovine Tb endemic, low numbers of red deer, goats, pigs, stock

trespass, mustelids.

**Plant Pests:** Broom (Cytisus scoparius). Pinus contorta, lupin (Lupinus), gorse. Refer

Tongariro/Taupo Problem Plant Strategy.

Fences: Fenced northern end and eastern margin behind National Park township.

Fishers Road, State Highway 4. Access:

**Concessions:** TT/070/EAS - NZ Police and TT/140/EAS - Dan Baker

Other Issues: Fishers Road managed by Ruapehu District Council. Surrounding landowners

landlocked by public conservation land. Overhead lines through reserve.

Management Priority: Protect biodiversity. Animal control. Plant pest control. Pinus contorta

managed as part of Erua Forest. Fencing behind National Park township.

Management Work Done: Possum control by Manawatu-Wanganui Regional Council. Last aerial 1080

operation winter 1998. The department goat control. Pinus contorta control

1997-1998.

Last Update: April 2000

Bibliography: Allen, E.C., In the Hills of the Waimarino. The Human Story of the

Development of the District., 1984.

Value: Historic: 3 Conservation: 1 Recreation: 3

Site Name: Matapuna Road Conservation Unit No.: 60003

Status: Conservation Area

Area (ha): 1.4947 File Reference: RES 078

Area Office: Ruapehu Map Reference: S20 162 065

Place: Tongariro-Ruapehu Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Tongariro

**Legal Description:** Section 21A, Block XVI,

Manganui Survey District.

**Special Conservation** Woodrose (*Dactylanthus taylori*), sphagnum bog.

Values:

Earth Data: Swampy wetland. Ring plain.

Flora: Mountain beech forest, manuka scrub, monoao-sphagnum peat bog.

Fauna: Most common forest birds.

Fishery Values: Nil

Tangata Whenua Issues: Information held in the domain of Ngati Rangi.

**Historic Resources:** Timber milling - silver pine, totara, kaikawaka (for fence battens).

Site Numbers Present: Nil

**Recreation:** Backcountry drive-in four-wheel-drive 100%.

Facilities: Nil

Animal Pests: Deer, possums, mustelids.

Plant Pests: Broom (Cytisus scoparius), gorse. Refer Tongariro/Taupo Problem Plant

Strategy.

Fences: Nil

Access: Matapuna Road (closed at wash-out 300 metres before site), foot access only

from this point.

Concessions: Nil

Other Issues: No vehicle access due to wash-out. No intention to reinstate road due to

relative lack of public interest.

Management Priority: Manage in conjunction with Tongariro National Park. Assess gazettal as part

of Tongariro National Park.

Management Work Done: Occasional hand pulling of plant pests.

Last Update: April 2000
Bibliography: Unknown

Value: Historic: 2 Conservation: 3 Recreation: 3

Site Name: Manganuioteao Conservation Unit No.: 60004

Status: Conservation Area

Area (ha):0.8985File Reference:RES 078Area Office:RuapehuMap Reference:\$20 161 114

Place: Tongariro-Ruapehu Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Tongariro

Legal Description: Part Section 17, Block VIII,

Manganui Survey District.

Special Conservation Corridor link with Tongariro National Park. Water conservation order over

Values: river. Cliff-face vegetation.

Earth Data: Steep gorge. Ring plain.

Flora: Mountain beech forest, Machaerina mountain flax, cliff-face tussockland.

Toetoe-broadleaved species scrub. Some manuka.

Fauna: Most common forest birds, blue duck.

**Fishery Values:** National importance. Significant native fish population (11 species).

Tangata Whenua Issues: River significant as highway. Information held in the domain of Ngati Rangi.

Historic Resources: Obelisk marking final peg, adjacent to the reserve. North Island main trunk

line.

Site Numbers Present: Nil

**Recreation:** Nil. Backcountry drive-in 100%.

Facilities: Nil

Animal Pests: Possums, mustelids.

Plant Pests: Pinus contorta, broom (Cytisus scoparius), lupin (Lupinus). Refer Tongariro/Taupo

Problem Plant Strategy.

Fences: Nil

Access: State Highway 4.

Concessions: Nil

Other Issues: Potential road diversion through area.

Management Priority: Manage in conjunction with Tongariro National Park. Remove Pinus contorta.

**Management Work Done:** All large seeding *Pinus contorta* trees removed.

Last Update: April 2000

Bibliography:

Cudby, E.J., Foster, J.M., Strickland, R.R., Manganuioteao Fishery., MAF

Fisheries Division, 1986

DOC Wanganui Conservancy, <u>Manganuioteao River</u>, <u>Water and Soil Conservation Act 1967</u>, National Water Conservation Order Application.,

DOC, 1987

Rich, J., Management Strategy for the Riparian Zones of the Manganuioteao

River., Lincoln University MSc thesis, 1991

Value: 1 Conservation: 3 Recreation: 3

Site Name: Taupo Landing Conservation Unit No.: 60005

Status: Recreation Reserve

Area (ha): 2.7455 File Reference: RES 018

Area Office: Turangi/Taupo Map Reference: U18 767 751

Place:Taupo BasinManagement Plan:YesLocal Authority:Taupo District CouncilEcological District:Taupo

Legal Description: Part Section 6, Block II,

Tauhara Survey District and Part Section 6, Block XXXIV,

Town of Taupo.

**Special Conservation** Foreshore open space.

Values:

Earth Data: Lake terrace - gravel beach. Site abuts Waikato River outlet. Only known

outlet from Lake Taupo.

Flora: Amenity planting.

Fauna: Occasional forest birds. Waterfowl.

Fishery Values: Main launching site of Taupo boats.

Tangata Whenua Issues: Rara-a-kiri canoe landing reserve.

Historic Resources: Site of early European occupation on the shores of Lake Taupo. Memorial

stones mark early grave sites.

Site Numbers Present: Nil

**Recreation:** Berthing facilities for boats.

Facilities: Boat ramp and associated facilities. Toilets, concessions and associated

facilities.

Animal Pests: Common urban pests.

Plant Pests: Common urban pests.

**Fences:** Amenity fencing (not DOC-maintained).

Access: Redoubt Street, Lake Terrace. Walking access from Lake Terrace.

Concessions: TT/053/STR - Taupo's Floatplane Ltd., TT/053/STR - Taupo Commercial

Launchmen's Association, TT/058/STR - Lake Taupo Yacht Club, TT/065/STR - Taupo Lakeside Services, TT/044/STO - Mobil Oil NZ Ltd., TT/164/SER - Harbourside Café and TT/169/SER - Taupo Service Station.

Other Issues: Internal Affairs appointed to control and manage.

Management Priority: Ensure proper management of site by Internal Affairs. Assist in finalisation of

Management Plan.

Management Work Done: Control exercised by Internal Affairs. Management of concessions by the

department.

April 2000 Last Update:

Bibliography: Unknown

Historic: 2 **Conservation:** 3 3 Recreation: Value:

Value:

**Historic:** 

2

Conservation:

Site Name: Taonui Conservation Unit No.: 60006 Status: Conservation Area 7.3417 File Reference: **RES 078** Area (ha): **Area Office:** Map Reference: S20 160 025 Ruapehu Management Plan: Place: Tongariro-Ruapehu No Ruapehu District Council **Ecological District: Local Authority:** Tongariro Closed road in Block IV, Legal Description: Makotuku Survey District. **Special Conservation** Nil Values: Earth Data: Ring plain. Waimarino lahar deposit and Pliocene sandstone with ash overlay. Flora: Grass Fauna: Sheep, cattle. Fishery Values: Regional importance. Brown trout, koura, eels in limited numbers. Limited access to site. Tangata Whenua Issues: Waahi tapu site related to food gathering. Information held in the domain of the Ngati Rangi people. **Historic Resources:** Old coach road. Site Numbers Present: Nil Recreation: Fishing low, hunting low on boundary. Backcountry drive-in. Four-wheeldrive 100%. **Facilities:** Nil **Animal Pests:** Possums, hares, rabbits, deer, mustelids, cats. **Plant Pests:** Grass, blackberry. Refer Tongariro/Taupo Problem Plant Strategy. Fences: Top half fenced on western boundary. Western boundary fences entire length. Eastern boundary open to stock access. Access: Over private land from Matapuna Road. **Concessions:** Other Issues: Currently managed as part of adjacent farm. **Management Priority:** Manage in conjunction with adjacent farm. Assess for disposal. Management Work Done: Site fenced. Possum control winter 1997 as part of Raetihi Hill operation. Ongoing possum control through bait stations. Last Update: April 2000 Bibliography: Unknown

Recreation:

3

Site Name: Ohakune Field Centre Conservation Unit No.: 60007

Status: Conservation Area

Area (ha):0.1088File Reference:ACC 009Area Office:RuapehuMap Reference:S20 179 976

Place: Tongariro-Ruapehu Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Tongariro

**Legal Description:** Part Section 2, Block I, Karioi

Survey District.

**Special Conservation** 

Values:

Nil

Earth Data: Near stream edge and crater on ring plain.

Flora: Native plantings, mown grass.

Fauna: Most common birds (introduced and native), NZ falcon. Occasional blue

duck.

Fishery Values: Trout fishery of local significance, common indigenous fish in stream adjacent

to site.

**Tangata Whenua Issues:** Information held in the domain of Ngati Rangi.

Historic Resources: Elephant skeleton buried in nearby site (from Wrigley brothers travelling

circus when this site was the old showground).

Site Numbers Present: 6125

**Recreation:** Passive. Urban 100%.

**Facilities:** Field centre base, interpretation centre, public toilets.

Animal Pests: Dogs, cats, magpies, rabbits, possums, rats, mice, mustelids.

Plant Pests: Cotoneaster, blackberry, broom (Cytisus scoparius), ragwort (Senecio jacobaea),

montbretia. Refer Tongariro/Taupo Problem Plant Strategy.

**Fences:** Fenced western and southern boundaries. Good condition.

Access: Ohakune Mountain Road.

Concessions: Nil
Other Issues: Nil

Management Priority: Replant to cut down on mowing. Upgrade visitor centre. Maintain public

facilities. Provide new disabled access toilets.

Management Work Done: Replanting, displays upgraded.

Last Update: April 2000
Bibliography: Unknown

Value: Historic: 2 Conservation: 3 Recreation: 1

Site Name: Hospital Conservation Unit No.: 60008

Status: Conservation Area

Area (ha): 6.5061 File Reference: ACC 009

Area Office: Ruapehu Map Reference: S20 183 975

Place: Tongariro-Ruapehu Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Tongariro

**Legal Description:** Sections 107 and 108, Block I,

Nil

Karioi Survey District.

Special Conservation

Values:

Earth Data:

Ring plain. Near stream edge and crater.

Flora: Lawson's cypress (Chamaecyparis lawsoniana), beech-mixed podocarp forest (to

edge), native plantings, flax, tussockland, mown grass.

**Fauna:** Most common forest birds.

Fishery Values: Trout, koura, eels.

Tangata Whenua Issues: Unknown

**Historic Resources:** Bowling club since ca 1940.

Site Numbers Present: Nil

Recreation: Urban 100%.

**Facilities:** Workshop, DOC housing, ancillary buildings.

Animal Pests: Possums, rats, cats, dogs, magpies, rabbits, mustelids.

Plant Pests: Cotoneaster, barberry (Berberis), privet, broom (Cytisus scoparius), ragwort

(Senecio jacobaea), Lawson's cypress (Chamaecyparis lawsoniana), crack willow.

Refer Tongariro/Taupo Problem Plant Strategy.

**Fences:** Fully fenced on south boundary.

Access: Ohakune Mountain Road.

Concessions: TT/019/GRA - Haora Hape.

Other Issues: Bowling club grass currently mown on contract.

Management Priority: Extend workshop, dispose of land within grazing licence, eradicate plant pests,

extend existing fire depot to house slipon unit.

**Management Work Done:** Management of grazing licence, site maintenance, plant pest control.

Last Update: April 2000
Bibliography: Unknown

Value: Historic: 3 Conservation: 3 Recreation: 3

Site Name: Tawhero Conservation Unit No.: 60009

Status: Conservation Area

 Area (ha):
 0.2200
 File Reference:
 RES 078

 Area Office:
 Ruapehu
 Map Reference:
 \$20 184 953

Place: Tongariro-Ruapehu Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Tongariro

Legal Description: Part Section 10, Block V,

Karioi Survey District.

Special Conservation Nil

Values:

Earth Data: Ring plain.
Flora: Pasture.

Fauna: Farmland birds.

Fishery Values: Trout, eels, koura.

Tangata Whenua Issues: Information held in the domain of Ngati Rangi.

Historic Resources: Unknown

Site Numbers Present: Nil

**Recreation:** Fishing low. Rural 100%.

Facilities: Nil

Animal Pests: Unknown

Plant Pests: Refer Tongariro/Taupo Problem Plant Strategy.

Fences: Unknown

Access: Tawhero Road.

Concessions: Nil
Other Issues: Nil

Management Priority: Assess for disposal.

Management Work Done: Nil

Last Update: April 2000 Bibliography: Unknown

Value: Historic: 3 Conservation: 3 Recreation: 3

Site Name: Kiokio Conservation Unit No.: 60010

Status: Conservation Area

 Area (ha):
 0.6243
 File Reference:
 RES 078

 Area Office:
 Ruapehu
 Map Reference:
 \$20 205 950

Place: Tongariro-Ruapehu Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Tongariro

**Legal Description:** Section 90, Block V, Karioi

Survey District.

Special Conservation Nil

Values:

Earth Data: Flood plain of Mangateitei Stream on ring plain.

Flora: Podocarp-broadleaved species beech forest.

Fauna: Most common forest birds.

Fishery Values: Eels, koura, trout.

Tangata Whenua Issues: Information held in the domain of Ngati Rangi.

Historic Resources: Nil
Site Numbers Present: Nil

**Recreation:** Nil. Backcountry drive-in 100%.

Facilities: Nil

**Animal Pests:** Possums, deer, mustelids, cats, rats.

Plant Pests: Barberry (Berberis), broom (Cytisus scoparius), blackberry, montbretia. Refer

Tongariro/Taupo Problem Plant Strategy.

Fences: Fenced northern side.

Access: Off Dreadnought Road.

Concessions: Nil
Other Issues: Nil

Management Priority: Manage as part of Rangataua Scenic Reserve.

Management Work Done: Fenced. Plant pest control.

Last Update: April 2000
Bibliography: Unknown

Value: Historic: 3 Conservation: 3 Recreation: 3

Site Name: Tongariro Conservation Unit No.: 60011

Status: National Park

**Area (ha):** 79669.8002 **File Reference:** TON 001

Area Office: Ruapehu, Turangi/Taupo Map Reference: S19, S20, T19,

T20

Place: Tongariro-Ruapehu Management Plan: Yes

Local Authority: Taupo and Ruapehu district Ecological District: Tongariro

councils

Legal Description: Various

Special Conservation Values:

Most visited national park in New Zealand. Dual World Heritage area. Landscape and associated cultural significance. Focus of alpine recreation for North Island. Alpine vegetation, bogs and flush zones. Three species of mistletoe, kaikawaka and silver-pink pine forests. Grove of ribbonwood, *Thismia rodwayi*, woodrose (*Dactylanthus taylori*). Ruapehu Volcanic Centre, Murimotutomotu debris avalanche and Mt. Ngauruhoe have international geopreservation significance. Mangawhero Formation has national geopreservation significance. Significant orchid populations. Endangered swamp orchids.

Earth Data:

Spectacular and diverse active volcanic complex composed of composite andesitic volcanoes and surrounding ring plain. Volcanoes are more closely spaced and active than most others in the world. Uniquely accessible, active crater lake surrounded by glacial ice. High level of scientific interest in volcanic processes and features. Influenced by glacial erosion and catastrophic Taupo eruption of 186AD.

Flora:

Alpine rockland or gravelfield, alpine herbfield, red tussockland, alpine flush vegetation, red tussock-monoao shrubland, hard or blue tussockland, manuka, *Coprosma-Olearia virgata* peat bog, *Gleichenia-Empodisma* peat bog, monoao sphagnum peat bog, *Baumea* peat bog, *Dracophyllum* scrub, toetoe-broadleaved species scrub, manuka scrub, kanuka-manuka forest, kamahi forest, mountain beech forest, kaikawaka-mountain toatoa forest, kaikawaka-Hall's totara forest, rimu-kamahi forest, rimu forest, pink pine-mountain toatoa forest, flax-toetoe, tussockland, mixed podocarp-broadleaved species forest, beech-mixed podocarp forest, northern rata-rimu forest, mountain beech-kaikawaka forest, kaikawaka-kamahi forest, red beech-silver beech forest, red beech-rimu forest, red beech-forest, silver beech forest, mountain beech-pink or silver pine forest, red beech-Hall's totara forest, kahikatea forest, Hall's totara forest.

Fauna:

Most common forest birds, kereru, kaka, kakariki, NZ falcon, robin and rifleman. Fernbird present in many scrub associations. Remnant brown kiwi populations in north and west. Blue duck in most major rivers and streams. Seasonal use by banded dotterel, long-tailed cuckoo and shining cuckoo. Long-tailed bat. Short-tailed bat recorded at numerous locations.

Fishery Values:

Headwaters to trout fisheries of national importance. Limited fishery values on eastern side. Limited indigenous freshwater species.

Tangata Whenua Issues:

Peaks of Tongariro National Park gifted by Tuwharetoa people. Waahi tapu related to spiritual value of mountains. Information held in the domain of the

Tuwharetoa and Ngati Rangi.

**Historic Resources:** 

First national park in NZ. Whakapapa village buildings including The Grand Chateau, Waihohonu Hut, Glacier Shelter managed by Ruapehu Ski Club (open to public on request). Tourist tracks, coach roads. Timber milling tramlines, machinery and structures. Mangamate sheep yards. Ski areas and associated facilities. Skiing and associated facilities.

Site Numbers Present:

6101, 6102, 6103, 6104, 6105, 6107, 6109, 6110, 6111, 6112, 6113, 6114, 6115, 6117, 6118, 6119, 6120, 6121, 6122, 6124, 6127, 6152, 6153, 6154, 6155, 6156, 6157, 6201, 6203, 6204, 6205, 6206, 6207, 6208, 6209, 6211, 6212, 6215, 6216, 6218, 6219, 6220, 6221, 6223, 6224, 6225, 6226, 6227, 6228, 6230, 6231, 6232, 6233, 6234, 6257, 6260, 6273, 6274, 6276, 6277, 6282, 6283, 6284, 6358, 6359, 6360, 6361, 6362, 6363, 6364, 6365, 6366, 6367, 6369, 6379, 6380, 6621, 6624, 6625

Recreation:

Hunting moderate, walking high, tramping high, skiing high, alpine climbing high, sightseeing high, camping high, rock-climbing high, multi-sport events moderate, picnicking high, ski touring high, fishing low. Remote 55%, backcountry walk-in 20%, backcountry four-wheel-drive 5%, backcountry drive-in 20%.

**Facilities:** 

Walking/tramping tracks, visitor centres, three ski areas, serviced camping grounds, camping areas, huts, lodges, hotels, toilets, roads, car parks, picnic areas, shelters.

**Animal Pests:** 

Possums throughout contribute to kamahi defoliation in north and west and serious impacts on mistletoe. Red deer widespread. Sika deer present in east, pigs in Pihanga block and around Karioi in south. Goats at isolated locations as result of farm escapes. Hares in all open country, rabbits at lower altitude. Stock trespass. Mustelids widespread at lower altitudes.

**Plant Pests:** 

Pinus contorta, cotoneaster, hawkweed (Hieracium), broom (Cytisus scoparius), heather (Calluna vulgaris), blackberry, chilean flame creeper (Tropaeolum speciosum), Juncus bulbosus, montbretia, thistles, lotus, monkey musk (Mimulus), marram grass (Ammophila arenaria). Refer to Tongariro/Taupo Problem Plant Strategy.

Fences:

Well fenced on boundaries adjoining farmland.

Access:

State highways 1, 4, 47, 47A, 48, Ohakune Mountain Road (RDC), Mangatepopo Road, Ketetahi Road, Tukino Road (DOC), Easement of Right of Way A on DP 85041 (at Horopito).

**Concessions:** 

TT/002/ACC - Kah Corporation, TT/001/SKI, TT/004/SER, TT/038/GUI - Ruapehu Alpine Lifts, TT/003/SKI - Turoa Ski Resort, TT/005/SKI -Tukino Mountain Clubs Association, TT/010/ACC - Skotel, 57 Club Lodges, TT/181/STR - Fire Service, various telecommunication licences, IGNS monitoring sites, TT/072/GRA - F R Taylor Ltd, TT/135/EAS - Waitomo Energy Ltd., TT/068/EAS - Ruapehu District Council, various guiding, oneoff, event, food and transport permits, wild animal recovery permits from June 2000.

Other Issues:

Environmental and social impacts at high use recreation sites and facilities. Commercial recreation and tourism development pressures. Fragile erosion-prone soils, sewage disposal. State Highway 1 development (Desert Rd.) within national park boundaries. Trial applications of CMA de-icer on Desert Road.

Management Priority:

Ongoing management of Tongariro National Park consistent with World Heritage status and the Togariro National Park Management Plan. Review of Tongariro National Park Management Plan 2002.

Management Work Done:

Goats eradicated. Mistletoe protection implemented at Mangawhero and Whakapapa catchment, six exclosure plots established to monitor deer impacts, hunter monitoring, Waikato Regional Council possum control in Pihanga block. 1080 operation winter 1994, aerial 1080 over 1000 ha at Ketetahi Block October 1995. Aerial 1080 drop over 2400 ha Ohakune Mountain Road October 1994, 800 ha retreated 1997. management via operative management plan 1990. Staged restoration of old Waihohonu Hut 1997/1998, new interpretation panels 1999. Major track upgrades Tongariro Crossing 1993/1994 (incomplete), Taranaki Falls 1993/1994 (complete), Rotopounamu 1993/1994 to reduce environmental effects and improve facility standards. Hut and campsite improvements Tongariro Northern Circuit 1992/1993 - septic tank toilets installed Ketetahi Hut 1993, Mangatepopo Hut 1994, Waihohonu Hut 1994. Ongoing visitor facility inspection and improvements. New suspension bridges Whangaehu Track entrance redevelopment/shelters/flush toilets and Waihohonu. Ketetahi and Mangatepopo. Track visitor survey Tongariro Northern Circuit 1993/1994. Ten new pedestrian bridges installed 1996/1997. Silica Rapids Track and interpretation upgrades 1997. Major track realignment and upgrade Waihohonu Springs 1997/1998. Woodrose (Dactylanthus taylori) surveys, protection of those found. Volcanic warning systems including Tephra Detector System operative from winter 1998, Some possum surveys and control works 1994 onwards. Systematic Pinus contorta and broom (Cytisus scoparius) surveys and control. Visitor recreation work by universities. Extensive research, monitoring of forest health especially at Mount Hauhungatahi. Vegetation description map and plant species list (updates 1999 - ongoing).

Last Update:

December 2000

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Value: Historic: 1 Conservation: 1 Recreation: 1

Site Name: Pihanga Block Conservation Unit No.: 60011/1

Status: National Park

Area (ha): 4800.0000 File Reference: TON 001

Area Office: Turangi/Taupo Map Reference: T19 490 380

Place: Tongariro-Ruapehu Management Plan: Yes

Local Authority: Taupo District Council Ecological District: Tongariro

Legal Description: Various

Special Conservation Stronghold for woodrose (Dactylanthus taylori), grove of ribbonwood and

Values: Thismia rodwayi. Long-tailed bat populations. Pihanga volcano, Rotopounamu

graben, Horotore lava dome has regional geopreservation significance.

Earth Data: Kakaramea-Tihia-Pihanga composite volcano massif, crater lakes, fault scarps,

andesite, yellow/brown pumice soils and loams, podzolized in places.

Flora: Mixed podocarp broadleaved species forest, beech mixed podocarp forest,

subalpine scrub (Hall's totara and *Olearia*). Alpine herbfield. Stronghold for woodrose (*Dactylanthus taylori*), very large population recently found. *Empoduma* 

peat bog. Mixed podocarp forest. Baumea pest bog.

Fauna: Most common forest birds, NZ falcon, rifleman, kaka and kereru. Remnant

brown kiwi population.

Fishery Values: Headwaters to trout fisheries of national importance. Limited fishery values

on eastern side of Tongariro National Park. Lake Rotopounamu smelt

population replaced koaro.

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa.

**Historic Resources:** Milling. Old travel routes - other path formation for Hinimihi's Track.

**Site Numbers Present:** Refer conservation unit 60011.

**Recreation:** Walking high, tramping low, hunting low, swimming/canoeing low, picnicking

moderate, mountain biking low. Backcountry walk-in 46%, remote 20%,

backcountry drive-in 19%, backcountry four-wheel-drive 15%.

Facilities: Carparks, walking tracks, picnic areas, 2 telecommunications masts and

building on summit of Mount Pihanga.

Animal Pests: Possums throughout, contribute to kamahi defoliation and impacts on

woodrose (Dactylanthus taylori). Red deer, pigs in low numbers. Isolated goats

still present. Hares in alpine habitats, rabbits at lower altitudes.

Plant Pests: Heather (Calluna vulgaris), broom (Cytisus scoparius), Pinus contorta. Refer to

Tongariro/Taupo Problem Plant Strategy.

Fences: Well fenced on boundary adjoining Tokaanu Station, otherwise fencing not

applicable.

Access: State Highway 47.

**Concessions:** Refer conservation unit 60011.

Other Issues: Current demand for walking track from Lake Rotopounamu to Pihanga.

Future demand for access by telecommunications firms.

Management Priority: Maintain zero goat density, protect biodiversity, avoid, remedy, mitigate

environmental effects of facilities and social impacts at high use recreation facilities. Continue to enhance interpretation, education and information services. Continue to exclude heather (*Calluna vulgaris*) from top of Pihanga.

Continue to maintain Rotopounamu Track to high standard.

Management Work Done: Large scale aerial 1080 carrot possum operation August 1994 by animal health

board - highly successful (98% reduction). Trap catch still low in August 1998 (4-33% of RTC). Hare exclosure plots just off walking track near summit of Tihia. Woodrose (*Dactylanthus taylori*) surveys and protection (caging) on eastern and northern boundaries. Heather (*Calluna vulgaris*) monitoring. Continued recreation facilities maintenance. Heather beetle released 1997. Investigation into change of fish population completed by NIWA. Ongoing management of telecommunication site on summit of Mount Pihanga. Possum browse plots 1999 (PBI transects). Full plant species list (1999-

Pihanga).

Last Update: April 2000

**Bibliography:** Refer conservation unit 60011.

Value: Historic: 1 Conservation: 1 Recreation: 1

Site Name: Te Tatau Pounamu Conservation Unit No.: 60011/2

Wilderness Area

Status: National Park

Area (ha):6800.0000File Reference:TON 001Area Office:Turangi/TaupoMap Reference:T19 460 260

Place: Tongariro-Ruapehu Management Plan: Yes

Local Authority: Taupo District Council Ecological District: Tongariro

Legal Description: Various

**Special Conservation** Wilderness area, part of gifted land.

Values:

Earth Data: North-east sector Tongariro composite glaciated volcano, craters, geothermal

activity, upper ring plain, gorges, mainly andesite, recent glade soils on ash and

pumice, alpine soils.

Flora: Mixed beech forest, manuka and kanuka/manuka forest, alpine rockland and

gravelfield. Alpine herbfield, alpine flush vegetation, Hall's totara broadleaved

species forest, coarse tussockland.

Fauna: Most common forest birds, kereru, kaka, kakariki, NZ falcon, fernbird and

robin. Remnant brown kiwi population, possibly now extinct. Blue duck in most major rivers and streams. Seasonal use by banded dotterel, long-tailed

cuckoo and shining cuckoo, long-tailed bat.

Fishery Values: Limited. Headwaters to trout fisheries of national importance (Taupo trout

fishery).

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

**Historic Resources:** Sheep farming dating to early 1900s. Old concrete sheep-dip and pens and

house site near Mangamate Stream.

**Site Numbers Present:** Refer conservation unit 60011.

**Recreation:** Tramping and hunting low, mountain biking low. Backcountry drive-in 13%,

backcountry four-wheel-drive 4%, remote 83%.

Facilities: Four-wheel-drive road to Pillars of Hercules, Tree Trunk Gorge road (sealed

access to Tongariro River).

Animal Pests: Possums in low density contribute to Hall's totara die-back, northern slopes

Tongariro. Red and sika deer. Hares in alpine areas and forest clearings.

Plant Pests: Pinus contorta, heather (Calluna vulgaris), broom (Cytisus scoparius). Refer

Tongariro/Taupo Problem Plant Strategy.

Fences: Not applicable.

Access: State Highway 1, State Highway 47A across private land. Access via Tree

Trunk Gorge Road.

Concessions: Nil

Other Issues: Maintain status quo as wilderness area. Attempt to keep public access along

Tree Trunk Gorge Road as part of Nga Whenua Rahui proposal. Highway

realignment proposal/investigation.

Management Priority: Maintain zero goat density, protect biodiversity. Continue to enhance remote

experience. Ensure road realignment has minimal adverse effects. Ensure

Transpower pylons have minimal impact.

Management Work Done: Aerial 1080 pellet poisoning operation 4000 ha of Ketetahi forest below

bushline - October 1995. Reduction 61% (conservative estimate for entire 10,000 ha operation area, in the montane forest kill rate closer to 80%). Ongoing plant pest control (broom (*Cytisus scoparius*) and *Pinus contorta* removal). Monitoring of impacts of Ruapehu eruptions on water quality. Plant pest inventory completed. Monitoring highway realignment investigations 1997/1998. One hare exclosure plot established 1984.

Established forest monitoring regime 20m x 20m plots.

Last Update: April 2000

**Bibliography:** Refer conservation unit 60011.

Value: Historic: 1 Conservation: 1 Recreation: 3

Site Name: Tongariro Conservation Unit No.: 60011/3

Status: National Park

Area (ha): 24 200.0000 File Reference: TON 001

Area Office: Ruapehu, Turangi/Taupo Map Reference: T19 375 242

Place: Tongariro-Ruapehu Management Plan: Yes

Local Authority: Taupo District Council Ecological District: Tongariro

Legal Description: Various

**Special Conservation** 

Values:

Mistletoe (*Peraxilla tetrapetala*, *Alepis flavida*, *Tupeia antarctica*). Stronghold for blue duck, kiwi present. Peaks are part of gift area. Pukekaikiore lava dome, Pukekaikiore, Mitre Peak, Girdlestone Peak have regional geopreservation significance. Pukekaikiore cones, North Crater, Blue Lake, Meads Wall, Pukeonake cone exposure, Whakapapanui gorge section, Whangaehu gorge section, North Crater lava lake and explosion point, North Crater welded agglomerate, Meads Wall dike, Te Maari craters have national geopreservation status. Ketetahi Hot Springs and geothermal fields, Ngauruhoe 1975 ash deposits and block ash flows, Ngauruhoe historic lava flows, Red Crater, Wahianoa formation, Whakapapa lava field, Whangaehu, Red Crater dikes have international geopreservation significance.

Earth Data: Active composite volcanoes, crater lakes, scoria flows, lava flows, glacial

moraines, ring plain, mainly andesite, yellow/brown pumice soils and podzols

and loam. Recent and alpine soils.

Flora: Alpine rockland or gravelfield, alpine herbfield, red tussockland, alpine flush

vegetation, red tussock, monoao shrubland, *Dracophyllum* scrub, manuka scrub, mountain beech forest, *Gleichemia-Empodisma* peat bog, mountain toetoe,

broadleaved.

Fauna: Most common forest birds and fernbird. Remnant brown kiwi population.

Blue duck in most major rivers with riparian vegetation, NZ falcon, kakariki. Seasonal use by banded dotterel, shining cuckoo and long-tailed cuckoo, long-

tailed bat.

Fishery Values: Headwaters to Manganui otaeao and Whanganui catchments with koara, limited

eel populations, some trout.

Tangata Whenua Issues: Peaks of Tongariro National Park gifted by Tuwharetoa people. Waahi tapu

related to spiritual value of mountains. Ketetahi hot springs are private land

administered by Ketetahi Trust.

Historic Resources: Old Waihohonu Hut, old stage coach routes, old highway bridge, haunted

whare site, old Ketetahi site and bridle track, milling, boiler at Ketetahi, old salt

hut site.

**Site Numbers Present:** Refer conservation unit 60011.

Recreation: Tramping high, camping moderate, walking high, picnicking, hunting, ski

touring, alpine activities, kayaking, parapenting low. Rock climbing moderate.

Backcountry drive-in 20%, backcountry walk-in 40%, remote 40%.

**Facilities:** Walking tracks, camping areas, huts, toilets, car parks, roads. **Animal Pests:** Possums throughout in low density - contribute to serious decline in mistletoe. Red deer, widespread with serious impacts in places, occasional sika deer. High hare density in open and alpine areas. Mustelids. **Plant Pests:** Serious heather (Calluna vulgaris) threat to open country, broom (Cytisus scoparius) invading from west. Pinus contorta, gorse, cotoneaster, Juncus bulbosus in Emerald Lake. Refer Tongariro/Taupo Problem Plant Strategy. Fences: Animal enclosures/exclosures for rabbits, hares and deer. Access: State highways 1, 47, 47A, 4 and 48. Mangatepopo Road, Ketetahi Road (under the department's management). **Concessions:** Refer conservation unit 60011. Other Issues: Visitor conflict and visitor pressure very high. Recreation has potential impact on facilities such as huts and tracks. Conflict between day visitor sightseers and trampers. Petty theft at roadends. Heather beetle released December 1997. Environmental and social impacts of high use recreation sites and facilities. Commercial recreation/guiding demands for the use of the gift area. Illegal guiding over Tongariro Crossing. State Highway 1 realignment, road salt de-icing approval (CMA). Management Priority: Maintain zero goat density, protect biodiversity, avoid, remedy, mitigate environmental effects of facilities and social impacts at high use recreation facilities. Continue to enhance interpretation, education, information services, and World Heritage standing. Mistletoe protection (Peraxilla tetrapetala and Alepis flavida) implemented 1991, Management Work Done: upgrading of high use walking tracks, i.e. Mangatepopo and Ketetahi tracks. Staged restoration of Waihohonu Hut. Interpretation panels completed. Visitor asset management (ongoing). Recreation facilities maintenance and plant pest control (ongoing). Inventory of species on northern flank. Hare exclosures at Mangatepopo last visited in 1991, ongoing monitoring. Attempt to eradicate sedge from Emerald Lakes. Upgrade Great Walk gas installation. Aerial 1080 operations across northern aspects December 1995. Major broom (Cytisus scoparius) and heather (Calluna vulgaris) control 1999 (ongoing). Visitor asset management systems set up (ongoing). 10 bridge project 1996/1997. Juvenile heather beetles found 1999/2000. Last Update: April 2000

**Bibliography:** Refer conservation unit 60011.

Value:	Historic:	1	Conservation	1	Recreation	1

Site Name: Rangipo Conservation Unit No.: 60011/4

Status: National Park

 Area (ha):
 8350.0000
 File Reference:
 TON 001

 Area Office:
 Turangi/Taupo
 Map Reference:
 T20 309 107

Place: Tongariro-Ruapehu Management Plan: Yes

Local Authority: Taupo District Council Ecological District: Tongariro

Legal Description: Various

Special Conservation Gleichenia-Empodisma peat bog, parts will permanently remain red tussock due

**Values:** to wet conditions – no natural succession. Waihohonu tephra sections have

national geopreservation significance.

Earth Data: Lower slopes active composite cone, ring plain, glacial moraines, lava flow,

andesite, alpine and recent soils. Lahar ash wash fan.

Flora: Alpine rockland/gravelfield, alpine herbfield, red tussockland, alpine flush

vegetation, red tussock, monoao shrubland, manuka, toetoe shrubland,

Gleichenia-Empodisma peat bog, mountain beech forest.

Fauna: Most common forest birds, NZ falcon, fernbird. Blue duck in most major

catchments. Seasonal use by banded dotterel.

**Fishery Values:** Limited. Headwaters to Taupo trout fisheries.

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Unknown

**Site Numbers Present:** Refer conservation unit 60011.

**Recreation:** Tramping moderate, wilderness tramping low, hunting low, mountain biking

low. Backcountry drive-in 10%, backcountry four-wheel-drive 13%,

backcountry walk-in 20%, remote 57%.

**Facilities:** Walking tracks, roads, huts, toilets, signs.

Animal Pests: Low numbers of red/sika deer. Possum numbers low. Mustelids. Hares

widespread, rabbits in open areas at lower altitude.

Plant Pests: Pinus contorta, hawkweed (Hieracium), heather (Calluna vulgaris), broom (Cytisus

scoparius), marram grass (Ammophila arenaria), gorse, lupin (Lupinus). Refer

Tongariro/Taupo Problem Plant Strategy.

Fences: Not applicable.

Access: State Highway 1, Tukino Mountain Road.

**Concessions:** Refer conservation unit 60011.

Other Issues: Further demand for repeater site from other agencies. Public access down

Waipakihi Road. Continue public access from SH 1 across private land to

Waihohonu Hut. State Highway 1 realignment, pylon maintenance.

Association to four-wheel-drive standard only. Ensure vehicles stay on formed road. Ensure work done by Transpower contractors on pylon lines has minimal impacts. Refer conservation unit 60011. Ensure Desert Road realignment has minimal impact. Monitor State Highway 1 realignment

investigations.

Management Work Done: Plant pest control [Pinus contorta, marram grass (Ammophila arenaria), broom

(Cytisus scoparius)]. Monitoring of 1998 fire. Pylon work by Transpower completed with minimum impacts – received Conservation Award 1996. New bridges installed at Mangatoetoenui and Whangaehu 1996/1999. Waihohonu Track signs and camping area reorganised 1999. State Highway 1 realignment. Joint broom (Cytisus scoparius) and gorse control with Transit NZ, Transpower and the department. Heather beetles released December 1996 and January 1997. Beetle damage on heather (Calluna vulgaris) found at Te Piripiri Stream

in December 2000.

Last Update: January 2001

**Bibliography:** Refer conservation unit 60011.

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Value:	Historic:	1	Conservation:	1	Recreation:	1

Site Name: Ruapehu Pristine Alpine Zone Conservation Unit No.: 60011/5

Status: National Park

Area (ha): 1600.0000 File Reference: TON 001

Area Office: Ruapehu Map Reference: T20 313 105

Place: Tongariro-Ruapehu Management Plan: Yes

Local Authority: Ruapehu District Council Ecological District: Tongariro

Legal Description: Various

**Special Conservation** High altitude alpine zone. Cultural and spiritual significance, active volcanic

Values: site. Largest part of gift area. Active accessible crater lake surrounded by ice.

Crater Lake has international geopreservation significance. Pyramid Peak has national geopreservation significance. Tama Lakes Saddle Cone, Pinnacle Ridge and Te Herenga lava flow have national geopreservation significance.

Earth Data: Glacierized active composite volcano, crater lake, glaciers, young moraines,

gorge, andesite, alpine soils.

Flora: Alpine rockland or gravelfield, alpine herbfield, alpine flush vegetation.

**Fauna:** Seasonal use by banded dotterel, NZ falcon and pipit.

**Fishery Values:** Refer conservation unit 60011. Headwaters for important fisheries.

Tangata Whenua Issues: Part of area originally gifted to Crown. Highest spiritual values for the

mountain area. Information held in the domain of Ngati Tuwharetoa and

Ngati Rangi.

**Historic Resources:** Historical climbing, skiing activities.

**Site Numbers Present:** Refer conservation unit 60011.

**Recreation:** Walking high, climbing and ski touring moderate, skiing high, snowboarding

moderate, parapenting low. Remote 100%.

Facilities: Shelter (Dome).

Animal Pests: Occasional hares, possums and mustelids. Limited due to altitude.

Plant Pests: Pinus contorta, heather (Calluna vulgaris) on lower areas. Refer Tongariro/Taupo

Problem Plant Strategy.

Fences: Not applicable.

Access: Bruce Road, Ohakune Mountain Road, Tukino Mountain Road provide the

closest road access.

**Concessions:** Refer conservation unit 60011.

Other Issues: Scene of recent volcanic activity. Appropriateness of filming activities and

helicopter use. Illegal guiding/instruction. Crater Lake Hazard Management

Strategy. Eruption detection strategy, Dome houses system.

Management Priority: More strongly protected than rest of park - minimal development is the goal.

Refer conservation unit 60011.

Management Work Done: Plant pest control Pinus contorta, safety work (Eruption detection system EDS),

emergency shelter, ongoing avalanche works.

Last Update: April 2000

Bibliography: Refer conservation unit 60011.

Historic: 1 **Conservation:** Recreation: Value:

Site Name: Status:	Skifield/Village Areas National Park	Conservation Unit No.:	60011/6				
Area (ha):	2500	File Reference:	TON 001				
Area Office:	Ruapehu, Turangi/Taupo	Map Reference:	T20 355 110, T20 305 155, S20 280 080				
Place:	Tongariro-Ruapehu	Management Plan:	Yes				
Local Authority:	Ruapehu District Council	Ecological District:	Tongariro				
Legal Description:	Various						
Special Conservation Values:		ni tapu sites). Kiwi around W nacle Ridge welded airfall t					
Earth Data:	Signs of composite volcano,	oluffs, valleys, andesite, mainly a	alpine soils.				
Flora:	Subalpine herbfield. Alpine rockland or gravelfield, tussockland. Pockets of mountain beech forest. Alpine bogs and wetlands (no beech forest on Turoa).						
Fauna:	Most common forest birds, blue duck and NZ falcon. Turoa - New Zealand pipit, occasional NZ falcon.						
Fishery Values:	Headwaters to trout fisheries of national importance. Limited fishery values on eastern side of Tongariro National Park. Native fish habitat. Limited populations of eel and trout.						
Tangata Whenua Issues:	Borders land gifted originally to Crown - strong interest in all ski area development/ history, i.e. only Whakapapa. Current Treaty claim on Turoa ski area - Waitangi claim no. 153. Parts of ski area with waahi tapu significance. Strong interest from Ngati Rangi and Ngati Tuwharetoa.						
Historic Resources:	Whakapapa village, buildings, skiing museum-historic ski hut, glacial hut. First highly developed ski area in NZ. Grand Chateau, Fergusson Cottage and laundry building, garage, Thompson's Lodge, Lovershack and other buildings in village historic area.						
Site Numbers Present:	Refer conservation unit 60011.						
Recreation:	Walking high, camping high, picnicking high, skiing high, rock-climbing moderate, ice climbing low, sightseeing high. Backcountry drive-in 100%. Tukino - backcountry four-wheel-drive. Hunting low.						
Facilities:	Roads, walking tracks, picnic area, carpark, toilets, public shelter, Whakapap Holiday Park management contract. Ski-field facilities (lifts, cafes, stequipment), accommodation. Visitor centres and two private club lodg accommodation.						
Animal Pests:	Stoats, cats, hares, rats. Whakapapa has weasels, possums, dogs, red demice.						

Heather (Calluna vulgaris), Pinus contorta, Scotts pine. Refer Tongariro/Taupo

Plant Pests:

Problem Plant Strategy.

Fences:	Safety	fences /	barriere	fences l	w cewerage	olant	fences o	bound	village houses,
rences.	Salety	rences/	Dainers,	Tellees 1	by sewerage	ргаш,	Tences a	around	vinage nouses,

boundary fences (general).

Access: Ohakune Mountain Road, Bruce Road and Tukino Mountain Road.

**Concessions:** Refer conservation unit 60011.

Other Issues: Visual - rubbish/sewerage; park/ski area development clash; lodges, human

impacts (crowding), structural impact, fire risk, emergency services. Treaty claim (covers most of Turoa ski-field). Whakapapa village management plan.

Sewerage scheme.

Management Priority: Liaison with ski area/club operators to ensure minimal impact. Refer

Conservation Unit 60011.

Management Work Done: Facility development, recreation and interpretation (ski area accommodation,

information centre, fast food, trackends) plant pest and animal control (stoats, rats, hares, deer etc., thistles, ragwort (Senecio jacobaea), Pinus contorta and all roadside exotic plants, road and track maintenance. Inventory of fish populations, heather beetles released in village area October 1997. Whakapapa village development plan including holiday park. Transfer of Christiana Ski

Club to Sir Edmund Hillary Outdoor Pursuits Centre 1999 (Tukino).

Last Update: April 2000

**Bibliography:** Refer conservation unit 60011.

Value: Historic: 1 Conservation: 1 Recreation: 1

Site Name: Hauhungatahi Wilderness Conservation Unit No.: 60011/7

Area

Status: National Park

 Area (ha):
 9700.0000
 File Reference:
 TON 001

 Area Office:
 Ruapehu
 Map Reference:
 \$20 205 135

Place: Tongariro-Ruapehu Management Plan: Yes

Local Authority: Ruapehu District Council Ecological District: Tongariro

Legal Description: Various

Values:

Special Conservation Area of special biodiversity - plant species. High floralistic diversity. Short-

tailed bats. Wilderness area. Hauhungatahi has regional geopreservational

significance.

Earth Data: Andesite cone over sandstone, ring plain, pumice, alluvium, yellow/brown

pumice soils, podzolized loams.

Flora: Alpine herbfield, red tussockland, alpine flush vegetation, red tussock, monoao

shrubland, mixed podocarp-broadleaved species forest, mountain beech forest, kaikawaka-mountain toatoa forest. Kaikawaka-Hall's totara forest, rimu/kamahi forest, pink pine mountain toatoa forest, kaikawaka mountain

beech forest, silver pine mountain beech.

**Fauna:** Refer conservation unit 60011.

Fishery Values: Headwaters of trout fisheries of national importance. Limited fishery values

on eastern side of Tongariro National Park. Headwaters of the Whagaehuehu

fishery.

Tangata Whenua Issues: Information held in the domain of Ngati Rangi.

**Historic Resources:** Old tracks, historical logging (extensive tramlines) off State Highway 4. Site of

last kakapo population in the North Island.

**Site Numbers Present:** Refer conservation unit 60011.

**Recreation:** Tramping moderate, hunting moderate, wilderness tramping low. Backcountry

drive-in 10%, backcountry walk-in 15%, remote 75%.

Facilities: Hunters' routes.

Animal Pests: Possums throughout contributing to kamahi, totara and kaikawaka die-back,

mistletoe degeneration. Red deer widespread, occasional sika deer. Hares in

open country. Mustelids.

Plant Pests: Pinus contorta, heather (Calluna vulgaris), exotic forestry. Refer Tongariro/Taupo

Problem Plant Strategy.

Fences: Not applicable.

Access: State Highway 4. Round the Mountain Track.

**Concessions:** Refer conservation unit 60011.

Other Issues: Conflict - railway through national park on the Hauhungatahi Wilderness Area

boundary. Railway fire risk. Potential logging adjacent to site. Heather

beetles released December 1997. Potentail logging within area.

Management Priority: Refer conservation unit number 60011. This site incorporates a wilderness

area.

Management Work Done: Plant pest control. Hunting for deer and possums. Seasonal aerial deer

recovery. *Pinus contorta* control. Partial ungulate exclosure plots. Thirty permanent forest health monitoring plots established 1997/98. Possum

browse transect established 1998. Six exclosure plots established 1998.

Last Update: April 2000

**Bibliography:** Refer conservation unit 60011.

Value: Historic: 2 Conservation: 1 Recreation: 1

Site Name: Conservation Unit No.: 60011/8

Status: National Park

 Area (ha):
 24610.0000
 File Reference:
 TON 001

 Area Office:
 Ruapehu
 Map Reference:
 \$20 205 005

Place: Tongariro-Ruapehu Management Plan: Yes

Local Authority: Ruapehu District Council Ecological District: Tongariro

Legal Description: Various

Special Conservation Significant mistletoe (Alepis flavida and Peraxilla tetrapetala) populations, highest

Values: biodiversity (general) in conservancy, largest lava flow in New Zealand passes

through area. Best examples of columnar joining in Tongariro National Park. Ohakune craters have national geopreservation significance. Heather beetle

released in Mangaturuturu Valley December 1997.

**Earth Data:** Slopes of glaciated active composite cone, upper ring plain, gorges, andesite.

Flora: Alpine rock and gravelfield, alpine herbfield, mountain beech forest, red

beech/silver beech forest, rimu beech forest, red tussock-Gleichenia peat bog.

Kaikawaka forest.

**Fauna:** Refer conservation unit 60011.

Fishery Values: Headwaters to trout fisheries of regional importance. Limited fishery values

on eastern side of Tongariro National Park.

**Tangata Whenua Issues:** Information held in the domain of Ngati Rangi.

Historic Resources: Logging tramways adjacent to Horopito area, old Blyth Hut sites, old Blyth

Track. Mangaiti huts.

**Site Numbers Present:** Refer conservation unit 60011.

**Recreation:** Walking track high, tramping moderate, hunting moderate, picnicking high.

Backcountry drive-in 17.7%, backcountry four-wheel-drive 11.6%,

backcountry walk-in 4.5%, remote 66.2%.

Facilities: Walking track, huts, carparks, toilets, picnic areas, bridges.

Animal Pests: Possums throughout, red/sika deer, small numbers of pigs, hares in open

country, domestic stock trespass, mustelids, rats.

Plant Pests: Pinus contorta, heather (Calluna vulgaris). Refer Tongariro/Taupo Problem Plant

Strategy.

**Fences:** Fence on farm boundary (condition generally good).

Access: Ohakune Mountain Road. Horopito access (by permit only).

Concessions: Refer conservation unit 60011.

Other Issues: Refer conservation unit 60011.

Management Priority: Refer conservation unit 60011. Prevent heather (Calluna vulgaris) spread.

Management Work Done: Possum control in 550 hectares in mountain beech forest for mistletoe

protection in Mangaehuehu Hut area along Round the Mountain Track, Blyth Track, Horopito Ridge, Maungaturuturu. Major research site for short-tailed bat. Kaka monitoring. Extensive mistletoe survey and monitoring (ongoing).

Last Update: April 2000

Refer conservation unit 60011. Bibliography:

Value: Historic: 2 **Conservation:** 1 Recreation:

Site Name: Mangawhero Lowland Forest Conservation Unit No.: 60011/10

Status: National Park

 Area (ha):
 2050.0000
 File Reference:
 TON 001

 Area Office:
 Ruapehu
 Map Reference:
 \$20 180 000

Place: Tongariro-Ruapehu Management Plan: Yes

Local Authority: Ruapehu District Council Ecological District: Tongariro

Legal Description: Various

Special Conservation Only rata forest left in Tongariro Ecological District. Woodrose (Dactylanthus

Values: taylori), Thismia rodwayi. Mangawhero formation lavas have national

geopreservation significance.

Earth Data: Hill, gorges, ring plain, sandstone, shell beds, alluvium.

Flora: Kamahi forest, rimu forest, rata/kamahi/rimu forest. Woodrose (Dactylanthus

taylori).

**Fauna:** Dotterels. Refer conservation unit 60011.

Fishery Values: Headwaters of trout fisheries of national importance. Limited fishery values

on eastern side of Tongariro National Park.

Tangata Whenua Issues: Information held in the domain of Ngati Rangi.

Historic Resources: Railway viaducts (2), Taonui and Hapuawhenua, Horopito coach road, milling

remnants, tramlines, bridge remains, Mangaiti Hut, railway water dam.

**Site Numbers Present:** Refer conservation unit 60011.

Recreation: Walking high, sightseeing high, picnicking moderate, camping low.

Backcountry drive-in 27%, backcountry four-wheel-drive 51%, backcountry

walk-in 17%, remote 5%.

**Facilities:** Picnic areas, car park, walking track, camping area, information centre.

Animal Pests: Possum in high numbers contribute to kamahi, totara and rata die-back. Low

to moderate red deer numbers, mustelids, cats, rats, mice.

Plant Pests: Barberry (Berberis), blackberry, broom (Cytisus scoparius), gorse, Pinus contorta,

lupin (Lupinus), ragwort (Senecio jacobaea), crackwillow, Himalayan honeysuckle

(Leycesteria formosa). Refer Tongariro/Taupo Problem Plant Strategy.

**Fences:** Well fenced along farm boundaries.

Access: Ohakune Mountain Road.

**Concessions:** Refer conservation unit 60011.

Other Issues: Site of Ohakune water supply catchment.

Management Priority: Refer conservation unit 60011. Ongoing replacement of farm boundary

fences.

Management Work Done: Goats eradicated 1993, aerial 1080 pellet poison bait station operation August

1997. Invertebrate/toxin research by Science and Research. Eastern perimeter of possum control area maintained with bait station network. Aerial 1080 possum control operation 2400 ha, October 1994, 1600 ha retreated western section August 1997. Currently maintained with poison bait stations.

Woodrose (Dactylanthus taylori) caging.

Last Update: April 2000

**Bibliography:** Refer conservation unit 60011.

Value: Historic: 1 Conservation: 1 Recreation: 1

Site Name: Waingakia Stream Conservation Unit No.: 60012

Status: Conservation Area

Area (ha): 821.3000 File Reference: FOP 003

Area Office: Turangi/Taupo Map Reference: U20 717 074

Place: Kaimanawa-Moawhango Management Plan: Yes

Local Authority: Rangitikei District Council Ecological District: Moawhango

**Legal Description:** Lot 1, DP 56327, XI, XII, XV

Mangamarie Survey District.

Special Conservation

Values:

Nil

Earth Data: Steep high country. Kaimanawa greywacke, overlayed by 30-layer pumice.

Overlayed by yellow/brown pumice soils on loams.

Flora: Manuka scrub, mountain beech forest remnants amongst manuka.

Fauna: Most common forest birds, kakariki, NZ falcon, robin and rifleman. Seasonal

use by kaka, kereru. Blue duck in most major rivers and streams. Small scaled skink recorded in general area. Snails (*Powelliphanta marchanti*) possible. Long-

tailed bat likely. Kiwi possibly still present (unconfirmed).

Fishery Values: Significant wilderness fishery values. Brown/rainbow trout, eel, koura.

Conservation order over tributaries of Rangitikei River.

Tangata Whenua Issues: Part of main travel route from Ngamatea to Kaimanawa Ranges. Information

held in the domain of Ngati Tuwharetoa.

Historic Resources: Nil
Site Numbers Present: Nil

Recreation: Hunting moderate, rafting low, tramping low, fishing moderate. Remote

100%.

Facilities: Unmaintained track, Forks Spur. Waingakia helipad. Unauthorised fixed-wing

airstrip.

Animal Pests: Possums in low numbers, moderate populations of red and sika deer, hares in

open country, mustelids, goats.

Plant Pests: Hawkweed (Hieracium) likely, Pinus contorta. Refer Tongariro/Taupo Problem

Plant Strategy.

Fences: Nil

Access: Aerial access to Rangitikei/Waingakia confluence. Foot access via private

land.

Concessions: Various aerial landing permits (commercial and non-commercial).

Other Issues: Unauthorised helicopter landings. Site considered as part of Kaimanawa

Forest Park and managed as such.

Management Priority: Manage as part of Kaimanawa Forest Park. Gazette/investigate as part of

Kaimanawa Forest Park.

Management Work Done: Removal of several large Pinus contorta. Part of research site for short-tailed

oat.

Last Update: April 2000 Bibliography: Unknown

Value: Historic: 3 Conservation: 2 Recreation: 3

Site Name: Pokaka Conservation Unit No.: 60013

Status: Scenic Reserve

Area (ha):91.3091File Reference:RES 034Area Office:RuapehuMap Reference:\$20 128 118

Place: Plateau Forests Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Tongariro

**Legal Description:** Section 28, SO 28178, Block XII, Manganui Survey District

and Lot 1, DP 75616.

**Special Conservation** 

Values:

Significant to Maori people. Water conservation order on Manganuioteao.

Earth Data: Part of Manganuioteao gorge system in ring plain.

Flora: Mixed podocarp-broadleaved species forest. Cut-over regenerating vegetation.

Fauna: Most common forest birds. Important blue duck population in

Manganuioteao River. Long-tailed bat. Seasonal use by kereru, long-tailed

cuckoo, shining cuckoo, nesting site for NZ falcon.

Fishery Values: National importance. Significant native fish population (11 species). Limited

access to site.

Tangata Whenua Issues: Sacred - confluence of the Waimarino and Manganuioteao tapu to local Maori

- to be avoided. Information held in the domain of Ngati Rangi people.

**Historic Resources:** Timber milling early 1920s.

Site Numbers Present: Nil

Recreation: Hunting low, rafting low, kayaking low, fishing low/medium. Backcountry

drive-in four-wheel-drive 100%.

Facilities: Nil

Animal Pests: Possums, red deer in low numbers, stock, goats, rats, mustelids.

Plant Pests: Broom (Cytisus scoparius), lupin (Lupinus). Refer Tongariro/Taupo Problem

Plant Strategy.

Fences: Completely fenced along farm boundaries. Repairs to boundary fences.

Access: Over private land off Mangaturuturu East Road.

Concessions: Ni

Other Issues: Managed as part of Erua Forest.

**Management Priority:** Eradicate goats. Manage as part of Erua Forest.

Management Work Done: Goat control since 1989. Manawatu/Wanganui Regional Council possum

control September 1996, aerial 1080 carrot drop, ongoing maintenance.

Last Update: April 2000
Bibliography: Unknown

Value: Historic: 2 Conservation: 2 Recreation: 3

Site Name: Horopito West Conservation Unit No.: 60014

Status: Scenic Reserve

Area (ha): 16.1874 File Reference: RES 024

Area Office: Ruapehu Map Reference: S20 154 037

Place: Tongariro-Ruapehu Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Tongariro

**Legal Description:** Sections 6 and 7, Block XVI,

Manganui Survey District.

**Special Conservation** Unknown

Values:

Earth Data: Ruapehu ring plain.

Flora: Mixed podocarp-broadleaved species forest.

Fauna: Most common forest birds. Seasonal use by kaka. Long-tailed cuckoo,

shining cuckoo, kereru.

Fishery Values: Eel, koura, trout.

Tangata Whenua Issues: Information held in the domain of Ngati Rangi.

Historic Resources: Nil
Site Numbers Present: Nil

**Recreation:** Nil. Backcountry drive-in 100%.

Facilities: Nil

**Animal Pests:** Possums, stock, cats, mustelids, rats.

Plant Pests: Barberry (Berberis), cotoneaster, Pinus contorta. Refer Tongariro/Taupo

Problem Plant Strategy.

**Fences:** North-eastern boundary fenced.

Access: From Horopito.

Concessions: Nil

Other Issues: Streams running through this reserve source the Raetihi water supply.

Management Priority: Remove plant pests.

Management Work Done: Barberry (Berberis), cotoneaster control. Pinus contorta removed.

Last Update: April 2000

Bibliography: NZ Commission for the Environment, Environmental appraisal on the

proposal by NZ Railways Corporation for the North Island main trunk railway

proposed Ohakune/ Horopito deviation., Government Printing, 1984

Value: Historic: 3 Conservation: 3 Recreation: 3

Site Name: Rangataua Conservation Unit No.: 60015

Status: Scenic Reserve

Area (ha): 58.4224 File Reference: RES 026

Area Office: Ruapehu Map Reference: S20 215 950

Place: Tongariro-Ruapehu Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Tongariro

Legal Description: Part Section 45, SO 16644,

Block V, Karioi Survey

District.

Special Conservation Peat bog - orchids potential. Roosting sites for long-tailed bat. Woodrose

Values: (Dactylanthus taylori) likely.

**Earth Data:** Flood plain of Mangateitei Stream in ring plain.

Flora: Manuka-coprosma-olearia virgata peat bog, beech-mixed podocarp forest,

kahikatea forest. Woodrose (Dactylanthus taylori) likely.

Fauna: Most common forest birds. Seasonal use by kereru. Short-tailed bats. Long-

tailed bats likely.

Fishery Values: Trout, eel, koura, Mangateitei and Mangaehuehu streams.

**Tangata Whenua Issues:** Information held in the domain of Ngati Rangi.

Historic Resources: Unknown

Site Numbers Present: Nil

**Recreation:** Picnicking low. Backcountry drive-in 100%.

Facilities: Nil

Animal Pests: Possums, stock, mustelids, limited numbers of pigs, deer.

Plant Pests: Barberry (Berberis), broom (Cytisus scoparius), Pinus contorta, monkey musk

(Mimulus), montbretia, blackberry. Refer Tongariro/Taupo Problem Plant

Strategy.

**Fences:** Fenced north-eastern boundary. South-western boundary cattleproof only.

Access: Mangateitei Road. Dreadnought Road.

Concessions: Nil
Other Issues: Nil

Management Priority: Fence south-eastern boundary sheep-proof. Systematically remove barberry

(Berberis).

Management Work Done: Darwins barberry (Berberis darwini) control work (R.P.M.S 1999 ongoing).

General survey undertaken of most of area.

Last Update: April 2000

Atkinson, I.A.E., Features of the Rangataua Lava Flow, 1980

DOC, Comparative Bird Study of Rangataua State Forest and an area of

Tongariro National Park., DOC

DSIR Botany Division, Tongariro National Park Board, An evaluation of the case for boundary adjustments in the region of the Rangataua State Forest

scientific advisory committee, 1980

Value:

Historic: 3 Conservation: 3 Recreation: 3	toric:	Historic:	3 Conservation	<b>:</b> 3	Recreation:	3
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Site Name: Mangaehuehu Conservation Unit No.: 60016

Status: Scenic Reserve

 Area (ha):
 77.4115
 File Reference:
 RES 025

 Area Office:
 Ruapehu
 Map Reference:
 \$20 216 935

Place: Tongariro-Ruapehu Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Tongariro

**Legal Description:** Part Section 33, SO 13788,

Block V, Karioi Survey

District.

Special Conservation U

Values:

Unknown

Earth Data: Ring plain and flood plain.

Flora: Beech-mixed podocarp forest.

Fauna: Most common forest birds. Seasonal use by kereru. Short-tailed bats.

**Fishery Values:** Trout, koura, eels.

**Tangata Whenua Issues:** Information held in the domain of Ngati Rangi.

Historic Resources: Unknown

Site Numbers Present: Nil

**Recreation:** Rural natural 100%.

Facilities: Nil

**Animal Pests:** Possums, stock, mustelids, seasonal pigs.

Plant Pests: Cotoneaster, barberry (Berberis), blackberry, ragwort (Senecio jacobaea), Pinus

contorta, willow. Refer Tongariro/Taupo Problem Plant Strategy.

**Fences:** Completely fenced. Stockproof. **Access:** State Highway 49 - Nei Street.

Concessions: TT/020/GRA - Deadman and TT/159/STR - Ruapehu District Council

(application).

Other Issues: Sewage treatment facility Ruapehu District Council. Subject to consent

application to discharge to stream. DOC submission requiring land-based

treatment.

Management Priority: Remove barberry (Berberis), cotoneaster, Pinus contorta. Grazing licence allows

fence maintenance on north-eastern and eastern boundary. Monitor potential threat of proliferation of old man's beard from adjacent land. Monitor

possum impacts on flora.

Management Work Done: Plant pest control.

Last Update: April 2000

Bibliography: Unknown

Value: Historic: 3 Conservation: 2 Recreation: 3

Site Name: Manga Te Puhi Conservation Unit No.: 60017

Status: Scenic Reserve

Area (ha):81.3418File Reference:RES 064Area Office:RuapehuMap Reference:S19 130 285

Place: Plateau Forests Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Taumarunui

Legal Description: Part Section 13, SO 17695, Section 28, SO15746, Block XII,

Kaitieke Survey District.

**Special Conservation** Woodrose (*Dactylanthus taylori*).

Values:

Earth Data: Steep hill country. Wanganui mudstone/limestone overlayed by

yellow/brown loams.

Flora: Tawa-podocarp forest. Woodrose (Dactylanthus taylori).

Fauna: Most common forest birds. Seasonal use by kaka, kereru. Long-tailed bat

likely.

Fishery Values: Koura, eels, trout, Galaxias species.

Tangata Whenua Issues: Information held in the domain of the Ngati Rangi and Tuwharetoa.

Historic Resources: Unknown

Site Numbers Present: Nil

**Recreation:** Hunting low. Rural natural remnant 100%.

Facilities: Nil

Animal Pests: Possums - bovine Tb endemic, goats, stock, occasional red deer, mustelids.

Plant Pests: Blackberry on margins. Broom (Cytisus scoparius), old man's beard, cotoneaster,

buddleia. Refer Tongariro/Taupo Problem Plant Strategy.

**Fences:** Fencing complete, good condition.

Access: Kaitieke Road.

Concessions: Nil

Other Issues: Goat control. Woodrose (Dactylanthus taylori) to be surveyed.

Management Priority: Control animal pests.

Management Work Done: Ongoing possum control by Manawatu-Wanganui Regional Council. Last

aerial 1080 operation autumn 1997. Goat control by the department. Fencing

by the department and adjoining run holder autumn 1997.

Last Update: April 2000 Bibliography: Unknown

Value: Historic: 3 Conservation: 2 Recreation: 3	Value:		Historic:	Conservation:	2	Recreation:	3	
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Value:

Site Name: Raurimu Conservation Unit No.: 60018 Status: Scenic Reserve 53.5197 File Reference: **RES** 070 Area (ha): Area Office: Ruapehu Map Reference: S19 152 292 Place: Plateau Forests Management Plan: No Local Authority: Ruapehu District Council **Ecological District:** Tongariro Legal Description: Section 8, SO 16186, Block XII, Kaitieke Survey District. Mistletoe. Possible presence of woodrose (Dactylanthus taylori). **Special Conservation** Values: Earth Data: Steep hillcountry. Wanganui mudstone and limestone overlayed by yellow/brown loam. Flora: Mixed podocarp forest. Mistletoe. Woodrose (Dactylanthus taylori). Fauna: Most common forest birds. Seasonal use by kereru, kaka. NZ falcon. Fishery Values: Trout spawning stream, eels, koaro. Information held in the domain of Ngati Rangi. Tangata Whenua Issues: **Historic Resources:** Timber milling. Remains of logging tramline. Site Numbers Present: Nil Recreation: Hunting low. Rural natural remnant 100%. Facilities: Nil **Animal Pests:** Possums - bovine Tb endemic, goats, stock, occasional red deer, mustelids. **Plant Pests:** Cotoneaster, broom (Cytisus scoparius), willow, blackberry. Refer Tongariro/Taupo Problem Plant Strategy. Fences: Fenced 100%, good condition. Access: Kaitieke Road. **Concessions:** Nil Nil Other Issues: Management Priority: Control animal pests. Maintain fences. Protect biodiversity. Management Work Done: Ongoing possum control by Manawatu-Wanganui Regional Council. Last aerial 1080 operation autumn 1997. Goat control, plant pest control, fencing maintenance. A.E.E for logging completed 1996. Managed as part of Tongariro Forest. Last Update: April 2000 Bibliography: Unknown

Historic:

2

Conservation:

Recreation:

3

Site Name: Whakapapa Island Conservation Unit No.: 60019

Status: Scenic Reserve

 Area (ha):
 61.5121
 File Reference:
 RES 073

 Area Office:
 Ruapehu
 Map Reference:
 S19 188 485

Place: Plateau Forests Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Taumarunui

**Legal Description:** Part Section 86, SO 17116, Block VI, Hunua Survey

District.

**Special Conservation** 

Values:

Unknown

Earth Data: Flat island compound of pumice alluvium.

Flora: Hall's totara forest, kanuka-manuka scrub.

Fauna: Most common forest birds. Seasonal use by kereru. Waterfowl on river.

Long-tailed bat present.

Fishery Values: Significant on Whakapapa and Wanganui rivers.

Tangata Whenua Issues: Traditional access route. Information held in the domain of the Ngati Rangi

and Ngati Tuwharetoa.

Historic Resources: Timber milling. Remains of logging road, bridge piers.

Site Numbers Present: Nil

**Recreation:** Fishing moderate, rafting low, kayaking low, walking low. Rural natural

remnant 100%.

**Facilities:** Walking track for fishing access.

**Animal Pests:** Stock, goats, mustelids, possums - bovine Tb endemic.

Plant Pests: Willow, broom (Cytisus scoparius), blackberry. Refer Tongariro/Taupo Problem

Plant Strategy.

Fences: Not adequate for stock trespass.

Access: Te Rena Road, Hohotaka Road.

Concessions: Nil

Other Issues: Erosion and river changes affect private buildings and properties adjacent.

Management Priority: Protect from stock trespass. Assess plant pest/animal pest problem. Maintain

fisher access. Diplomacy in river control works.

Management Work Done: Ongoing possum control by Manawatu-Wanganui Regional Council. Ground

poisoning with 1080, 1990-1993. Last aerial 1080 operation winter 1997.

Last Update: April 2000
Bibliography: Unknown

Value: Historic: 2 Conservation: 3 Recreation: 3

Site Name: Rangataua No. 2 Conservation Unit No.: 60020

Status: Conservation Area

 Area (ha):
 1290.0000
 File Reference:
 FOP 012

 Area Office:
 Ruapehu
 Map Reference:
 \$20 250 940

Place: Tongariro-Ruapehu Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Tongariro

Legal Description: Section 2, SO 36750, Block

VI, Karioi Survey District.

**Special Conservation** Mature forest types - wetland. Mistletoe (*Peraxilla colensoi* and *P. tetrapetala*) and

Values: orchids likely. North Island brown kiwi resident.

Earth Data: Ring plain.

Flora: Red beech-silver beech forest, red beech-rimu forest, red beech forest,

manuka-coprosma-olearia virgata peat bog, Carex-Juncus sedge rushland, exotic

planting.

Fauna: Most common forest birds, kaka, kereru, kakariki and robin. Remnant kiwi

population. Seasonal use by long-tailed cuckoo, shining cuckoo. Long- and

short-tailed bats recorded.

**Fishery Values:** Eel, koura. Reasonable backcountry fishing.

 Tangata Whenua Issues:
 Information held in the domain of Ngati Rangi.

**Historic Resources:** Timber extraction. Railways backing plant.

**Site Numbers Present:** 6135, 6136, 6137

**Recreation:** Mountain biking moderate, hunting moderate, trail biking low. Horse trekking

moderate. Backcountry drive-in 65.6%, backcountry four-wheel-drive 32.4%,

backcountry walk-in 2%.

Facilities: Walking track, roads, roadbridge.

Animal Pests: Possums, red deer in low-moderate numbers, few pigs in east. Sika deer in low

numbers, mustelids.

Plant Pests: Pinus contorta, barberry (Berberis), heather (Calluna vulgaris), blackberry, broom

(Cytisus scoparius), lupin (Lupinus), gorse. Refer Tongariro/Taupo Problem

Plant Strategy.

**Fences:** Fenced boundaries with adjoining farms to south and west.

Access: Via public road, Public Access Easement A on DP 70970 and various private

Karioi Forest Roads.

Concessions: TT/043/GRA - GA Fraser and TT/132/GUI - Ruapehu Outback

Adventures (application).

Other Issues: Access road agreement with Winstone Pulp International Ltd from Station

Road. Commercial horse trek operation under review. Easement from Railcorp for mountain biking on southern boundary. Maintain 2WD access. Visitor conflict between horses and mountain bikers. Used regularly for

defence training.

Management Priority: Improve recreation facilities. Protect biodiversity. Survey wetland. Remove

Pinus contorta seedlings from previously felled areas. Restrict heavy 4WD vehicle access from mountain bike tracks. Implement Track and Road

Hierarchy.

Management Work Done: Plant pest control. Signs for mountain biking tracks. Barriers put up to

restrict heavy 4WD access on mountain bike tracks. One deer exclosure plot established 1997. Monitoring contains comparative plots (non treatment) for Karioi Rahui monitoring (treatment). Mistletoe protection - banding host

trees. Kaka monitoring established (radio tagged females).

Last Update: April 2000 Bibliography: Unknown

Value: Historic: 2 Conservation: 1 Recreation: 2

Value:

Site Name: Whakapapa Gorge Conservation Unit No.: 60021 Status: Scenic Reserve File Reference: **RES 072** Area (ha): 81.1673 Area Office: Ruapehu Map Reference: S19 183 446 Place: Plateau Forests No Management Plan: Local Authority: Ruapehu District Council **Ecological District:** Taumarunui Legal Description: Section 65, SO 16034, Block X, Hunua Survey District. **Special Conservation** Blue duck, possibly kiwi. Values: Earth Data: Steep-sided river valley. Jurassic and oligocene sediments including limestone overlain by yellow/brown pumice soils on loams. Flora: Mixed podocarp-broadleaved species forest. Fauna: Most common forest birds. Seasonal use by kereru, kaka, long-tailed cuckoo, shining cuckoo. Waterfowl along river. Blue duck, possibly kiwi. Fishery Values: High trout fishery values, significant common freshwater fish values. Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa. **Historic Resources:** Logging tramline formation. Timber milling. Site Numbers Present: Nil Recreation: Hunting low, rafting low, kayaking low, fishing low. Backcountry drive-in 100%. **Facilities:** Vehicle track. Old logging roads. **Animal Pests:** Possums - bovine Tb endemic, stock trespass, goats, deer, pigs. **Plant Pests:** Blackberry, privet, buddleia, common plant pest species. Refer Tongariro/Taupo Problem Plant Strategy. Fences: Fenced on farm boundaries to east. Reasonable condition. Access: Via Tongariro Forest or Whakapapa River. **Concessions:** Nil Other Issues: Nil Management Priority: Control pests. Fence to protect from stock trespass. Management Work Done: Ongoing possum control by Manawatu-Wanganui Regional Council. Last aerial 1080 operation winter 1996. Fencing maintenance. Goat control by the department. Managed as part of Tongariro Forest. Blackberry control 1997. 1989 reserves study. April 2000 Last Update: Bibliography: Unknown

2

Historic:

**Conservation:** 

Recreation:

Site Name: Ohinetonga Conservation Unit No.: 60022

Status: Scenic Reserve

 Area (ha):
 144.6259
 File Reference:
 RES 067

 Area Office:
 Ruapehu
 Map Reference:
 \$19 170 425

Place: Plateau Forests Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Taumarunui

Legal Description: Section 41 and part Section

57, Block X, Hunua Survey

District.

Special Conservation Lagoon

Values:

Lagoon, kahikatea forest, unlogged podocarp, Thismia rodwayi.

Earth Data: Moderate-steep river valley with flat terraces top and bottom, Waimarino

lahars, overlain by yellow/brown pumice soils.

Flora: Mixed podocarp forest, kahikatea forest, tawa-podocarp forest, mixed

podocarp-broadleaved species forest, broadleaved species forest, submerged

aquatic herbfield, remnant black beech forest. Hard beech present.

Fauna: Most common forest birds. Seasonal use by kereru, kaka. Waterfowl on small

lake. Report of kokako-January 1997.

**Fishery Values:** High trout fishery values. Significant indigenous freshwater fish values.

Tangata Whenua Issues: Information held in the domain of Ngati Rangi. Waahi tapu sites on lagoon,

i.e., white eels etc..

**Historic Resources:** Timber milling - old logging road.

**Site Numbers Present:** 6242, 6243, 6244

**Recreation:** Walking medium, picnicking moderate, rafting moderate, kayaking moderate,

mountain biking medium. Swimming, fishing. Backcountry drive-in 100%.

Facilities: DOC roadbridge, walking tracks, picnic area, sealed vault toilet and pit.

Access road (metal).

Animal Pests: Possums - bovine Tb endemic, cats, dogs, stock trespass, mustelids.

Plant Pests: Water lily, blackberry, privet, old man's beard, broom (Cytisus scoparius),

buddleia, burdock, willow, Himalayan honeysuckle (Leycesteria formosa), Japanese honeysuckle (Lonicera japonica). Refer Tongariro/Taupo Problem

Plant Strategy.

**Fences:** Fenced on farm boundaries.

Access: Ohinetonga Road and State Highway 4 via Dominion Road.

Concessions: TT/069/GRA - C. R. Brown, TT/180/EAS - N O'donnell

Other Issues: Only western road entrance to Tongariro Forest Conservation Area. Ruapehu

District Council responsible for road maintenance to Whakapapa Bridge.

Management Priority: Maintain picnic facilities. Keep stock out. Possum control. Plant pest

control.

Management Work Done: Ongoing possum control by Manawatu-Wanganui Regional Council. Last

ground poisoning and trapping operation spring 1998. Goat control. Fencing

maintenance. Major upgrade and replacement survey 1989.

Last Update: April 2000 Bibliography: Unknown

Value: Historic: 2 Conservation: 2 Recreation: 1

Site Name: Raurimu Spiral Conservation Unit No.: 60023

Status: Scenic Reserve

 Area (ha):
 71.0420
 File Reference:
 RES 070

 Area Office:
 Ruapehu
 Map Reference:
 \$19 178 275

Place: Plateau Forests Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Tongariro

**Legal Description:** Section 48, SO 31183, Section

24, SO 31183, Block XII, Kaitieke Survey District.

**Special Conservation** Tall podocarps. Woodrose (*Dactylanthus taylori*).

Values:

Earth Data: Steep sided, margin of ring plain, overlain by podzolized yellow/brown

pumice soils.

Flora: Mixed podocarp forest, mixed podocarp-broadleaved species forest.

Woodrose (Dactylanthus taylori).

Fauna: Most common forest birds. Seasonal use by kereru, kaka, long-tailed cuckoo,

shining cuckoo. Long-tailed bat. Blue duck in Piopiotea Stream. NZ falcon,

kiwi likely but not recorded in 1992 survey.

Fishery Values: Trout fishery values. Significant indigenous freshwater fish values. Spawning

stream for Whakapapa River.

Tangata Whenua Issues: Information held in the domain of Ngati Rangi.

**Historic Resources:** Old dwelling sites on southern margin.

Site Numbers Present: 6246

**Recreation:** Walking low. Hunting low. Backcountry drive-in 100%.

Facilities: Nil

Animal Pests: Possums - bovine Tb endemic, goats, low numbers of red deer, mustelids.

Plant Pests: Blackberry on margins, Pinus contorta. Refer Tongariro/Taupo Problem Plant

Strategy.

**Fences:** Some fencing on western margin.

Access: State Highway 4.

Concessions: Nil

Other Issues: Fire risk from railway. Extremely high risk motor vehicle accident area -

pollution. Possible road realignment.

Management Priority: Control animal pests. Protect biodiversity.

Management Work Done: Ongoing possum control by Manawatu-Wanganui Regional Council. Last

aerial 1080 operation spring 1995. Goat control by the department.

Last Update: April 2000

Bib	liogra	phy:

Cunningham, A., Raurimu, Tongariro State Forest recreational development

proposals., New Zealand Forest Service, Wanganui, 1986

Department for Lands and Survey, <u>Tongariro State Forest: A management plan for the forest areas of Raurimu and Taurewa farm settlements.</u>, New

Zealand Forest Service, Palmerston North, 1986

Rotary Club of New Zealand, Raurimu spiral lookout rest area plan - King

Country (NZ)., Taumarunui Rotary Club of New Zealand

Value:

Historic: 3 Conservation: 3 Recreation: 2

Site Name: Otamangakau Wetlands Conservation Unit No.: 60024

Status: Conservation Area

Area (ha): 26.9116 File Reference: **RES 048** 

**Area Office:** Turangi/Taupo Map Reference: T19 381 381

Tongariro

Place: Tongariro-Ruapehu Management Plan: No

**Ecological District:** Legal Description: Part Okahukura 2B1 Maori

Block, IV Tongariro Survey

Ruapehu District Council

District.

**Special Conservation** 

**Local Authority:** 

Values:

Nil

Earth Data: Flat pumice alluvium.

Flora: Manuka scrub. Dracophyllum scrub, broom (Cytisus scoparius).

Fauna: Occasional forest birds, fernbirds.

Fishery Values: Nil

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Nil Nil Site Numbers Present:

Rural 100%. Recreation:

**Facilities:** House, shed (unlicenced)

**Animal Pests:** Horses, mustelids.

**Plant Pests:** Heather (Calluna vulgaris), broom (Cytisus scoparius), Pinus contorta, introduced

grasses. Refer Tongariro/Taupo Problem Plant Strategy.

Fences: Nil

Access: State Highway 47.

**Concessions:** Unlicensed occupation.

Other Issues: Large site - allocation to the department not realised.

Kaupapa Atawhai Manager to liaise with current unlicensed occupiers. Assess **Management Priority:** 

conservation value towards potential disposal by sale or lease.

Management Work Done: Pinus contorta removal in block behind house. 1997 Environment Waikato

possum control aerial 1080 opertation.

Last Update: April 2000 Bibliography: Unknown

Value: **Historic:** 3 Conservation: 3 Recreation: 3

Values:

Site Name: Mangamingi Stream Conservation Unit No.: 60025

Status: Conservation Area

 Area (ha):
 470.5719
 File Reference:
 RES 048

 Area Office:
 Turangi/Taupo
 Map Reference:
 T19 430 420

Place: Tongariro-Ruapehu Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Tongariro

Legal Description: Sections 2 and 3, Block VIII,

Puketi Survey District, Section 2, Block I, Pihanga Survey District and part Waimanu 2G3 Maori Block, Pihanga

Survey District.

Special Conservation The Kakaramea-Tihia massif is a volcanic centre with regional geopreservation

status. Excellent example of altitudinal sequence and high altitude unmodified wetland. Buffered by Tongariro National Park. Woodrose (*Dactylanthus taylori*) present (endangered), high diversity of bird species, North Island Kiwi

threatened (category "A" species), indigenous reptiles.

Earth Data: Steep. Part of Kakaramea Tihia volcanic massif.

Flora: Cutover mixed podocarp/hardwood forest; remnant red/silver beech forest;

regenerating broadleaved forest; *Olearia*-broadleaved-fivefinger shrubland; emergent stands of matai-kahikatea-miro-rimu in gullies over kamahirewarewa; square sedge peat bog, high altitude silver tussock-monoao-*Baumea* 

sedgeland peat bog.

Fauna: Most common forest birds. Remnant brown kiwi population. Seasonal use by

kereru, kaka, long-tailed cuckoo. Long-tailed bat common. Fernbird in scrub adjoining Lake Otamangakau. NZ falcon. Kokako reported -summer 1996-

1997.

Fishery Values: Conservation value in protection of receiving waters of Lake Otamangakau.

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

**Historic Resources:** Timber milling. Skid sites. Dwellings related to past logging activities.

Site Numbers Present: Nil

**Recreation:** Hunting low. Remote 40%, backcountry drive-in 60%.

Facilities: Road from Wairehu Boat Ramp to Lake Rotoaira Forest passes through block.

Animal Pests: Possums - bovine Tb endemic, red deer, sika deer rare but colonising, hares in

subalpine, mustelids.

Plant Pests: Broom (Cytisus scoparius), heather (Calluna vulgaris), Pinus contorta. Refer

Tongariro/Taupo Problem Plant Strategy.

Fences: Nil

Access: Wairehu Canal Road. Access through Rotoaira Forest land to fishery not legal

(Lake Otamangakau).

Concessions: Nil

Other Issues: Illegal firewood removal. Illegal access, dumping of rubbish.

Management Priority: Assess road through land administered by the department. Investigate public

access to block. Assess for gazettal as part of Tongariro National Park.

Management Work Done: Pinus contorta removal. Aerial 1080 drop for possum control by Environment

Waikato, August 1994, residual trap catch still low 1998. Woodrose

(Dactylanthus taylori) survey/monitoring.

Last Update: April 2000
Bibliography: Unknown

Value: 2 Conservation: 1 Recreation: 3

Value:

Site Name: Conservation Unit No.: 60026 Swamp Status: Conservation Area 43.1502 File Reference: **RES 048** Area (ha): Area Office: Turangi/Taupo Map Reference: T19 391 404 Place: Tongariro-Ruapehu Management Plan: No **Local Authority:** Ruapehu District Council **Ecological District:** Tongariro Legal Description: Section 1, Block I, Pihanga Survey District. **Special Conservation** Wetland. Values: Earth Data: Flat wet/dry wetland on banks of Wairehu Canal, flat pumice alluvium. Flora: Manuka scrub, Dracophyllum scrub, square sedge peat bog, Baumea peat bog. Fernbird, bittern, spotless crake, grey duck, mallard duck, swan. Fauna: Fishery Values: Conservation value in protection of Lake Otamangakau receiving waters. Rainbow and brown trout fisheries. Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa. **Historic Resources:** Nil Site Numbers Present: Nil Recreation: Gamebird hunting moderate. Backcountry drive-in 100%. Nil Facilities: **Animal Pests:** Possums - bovine Tb endemic, mustelids. **Plant Pests:** Broom (Cytisus scoparius), heather (Calluna vulgaris), Pinus contorta. Refer Tongariro/Taupo Problem Plant Strategy. Fences: Nil Access: Over private land from State Highway 4. Access for fishing, gamebird hunting. Concessions: Genesis (powerline easement) Other Issues: Powerline through block. Part of block damaged by wild fire in 1994, regenerating. Management Priority: Assess for integration into management regime used in Tongariro National Maintain, protect wetland values, biodiversity. Ensure Genesis powerline upgrade has minimal impacts on wetland values. Management Work Done: Transect set up 1994 to assess regeneration of wetland post fire. Genesis powerline upgrade maintained 1997. Environment Waikato possum control (aerial 1080 carrot) September 1997. Pinus contorta on three-year cycle. Last Update: April 2000 Bibliography: Unknown

**Historic:** 

3

**Conservation:** 

2

Recreation:

2002 - 2012

3

Site Name: Mangamutu Conservation Unit No.: 60027

Status: Conservation Area

Area (ha):5.1091File Reference:RES 048Area Office:Turangi/TaupoMap Reference:T19 424 399

Place: Tongariro-Ruapehu Management Plan: No

Local Authority: Taupo District Council Ecological District: Tongariro

Legal Description: Part 2G3 Maori Block, Waimanu, Block 1 Pihanga Survey

District.

Special Conservation Possible woodrose (Dactylanthus taylori), Thismia rodwayi, kiwi. Motuopihi lava

Values: domes have regional geopreservation significance.

Earth Data: Flat base of Tihia massif, stream and swamp, alluvium.

Flora: Mixed podocarp forest.

Fauna: Most common forest birds. Remnant brown kiwi population. Seasonal use by

kereru, kaka, long-tailed cuckoo. Long-tailed bat common. Fernbird in scrub

adjoining Lake Otamangakau. NZ falcon.

Fishery Values: Nil

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Unknown

Site Numbers Present: Nil

**Recreation:** Hunting low. Backcountry drive-in 100%.

Facilities: Nil

**Animal Pests:** Possums, seasonal use by red deer, mustelids.

Plant Pests: Broom (Cytisus scoparius). Refer Tongariro/Taupo Problem Plant Strategy.

Fences: Nil

Access: State Highway 47.

Concessions: Nil

Other Issues: Protect Motupohi from exploitation.

Management Priority: Assess for inclusion in Tongariro National Park. Manage under Tongariro

National Park Management Plan.

Management Work Done: Environment Waikato aerial 1080 drop August 1994.

Last Update: April 2000

Bibliography: Newman, M., Archaeological investigations in the vicinity of Lake Rotoaira

and the lower Tongariro River., New Zealand Historic Places Trust, 1988

Value: Historic: 3 Conservation: 3 Recreation: 3

Site Name: Rotomoho Stream Conservation Unit No.: 60028

Status: Conservation Area

Area (ha): 3.0200 File Reference: RES 048

Area Office: Turangi/Taupo Map Reference: T19 478 486

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

Legal Description: Parts Waihi-Kahakaharoa 2 and 3A Maori blocks, Puketi

Survey District.

Special Conservation

Values:

Earth Data:

Gully system. Underground stream, steep land soils.

Flora: Fivefinger-kohuhu forest, exotic plantings.

Nil

Fauna: Most common forest birds.

Fishery Values: Nil

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

**Historic Resources:** Old school site.

Site Numbers Present: Nil

**Recreation:** 100% backcountry drive-in.

Facilities: Nil

**Animal Pests:** Goats, possums, mustelids.

Plant Pests: Blackberry, broom (Cytisus scoparius), hawthorn, barberry (Berberis), montbretia,

periwinkle, Himalayan honeysuckle (Leycesteria formosa), climbing spindle berry

(Celastrus orbiculatus). Refer Tongariro/Taupo Problem Plant Strategy.

**Fences:** Fenced south-eastern side.

Access: State Highway 41.

Concessions: Nil

**Other Issues:** Removal of pines, restoration following as a priority.

Management Priority: Keep fenced to keep out stock.

Management Work Done: Pines and Lawson's cypress (Chamaevyparis lawsoniana) removed and some

restoration planting. Goats removed 1990. Ongoing Environment Waikato possum control since autumn 1997. Climbing spindle berry (Celastrus

orbiculatus) control.

Last Update: April 2000
Bibliography: Unknown

Value: Historic: 3 Conservation: 3 Recreation: 3

Site Name: Stump Bay Conservation Unit No.: 60029

Status: Conservation Area

Area (ha): 53.9320 File Reference: RES 048

Area Office: Turangi/Taupo Map Reference: T19 547 456

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

**Legal Description:** 3F3B2 and 3F4B2B, Maori

Block, Hautu, VII, XI, Puketi

Survey District.

**Special Conservation** Wetland, presence of bladderwort (*Utricularia australis*).

Values:

soils.

Flora: Baumea peat bog, raupo reedland, manuka scrub.

Fauna: Most common forest birds. Outstanding wetland habitat supporting

important populations of bittern, spotless crake, fernbird and wide range of

Flat wetland bordering shore of Lake Taupo. Pumice beach ridges and peaty

waterfowl.

Fishery Values: Protection of lake fishery habitat. Fishing from Lake Taupo shore.

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Unknown

Site Numbers Present: Nil

Earth Data:

**Recreation:** Gamebird hunting moderate, fishing moderate. Rural natural remnant 100%.

Facilities: Nil

Animal Pests: Possums - bovine Tb endemic, goats escaped from farm on Graces Road,

stock, cats, mustelids.

Plant Pests: Grey willow, crack willow, hawthorn, gorse, broom (Cytisus scoparius), lupin

(Lupinus), Spanish heath. Refer Tongariro/Taupo Problem Plant Strategy.

**Fences:** Unfenced in main. Fences generally inadequate.

Access: Over private land from State Highway 1 and Graces Road. Lakeshore foot

access right of way. Boat access from Lake Taupo.

Concessions: Nil

Other Issues: Much of area burnt in fire 1993. Some horse usage.

Management Priority: Remove goats. Upgrade fences. Protect biodiversity. Investigate integrated

management and classification of sites 60029, 60036 to best protect conservation values. Control plant pests following fire, exclude stock.

Monitor transect established after 1993. Attempt willow control.

Management Work Done: Goat control. Possum control by Waikato Regional Council (trapping and

ground poisoning) since 1992. Animal Health Board funded possum control 1080 aerial drop 1000 ha from delta to Motuoapa August 1998. Fencing inventory undertaken 1997. Poisoning willow 1993/1994. Plots established 1993 to monitor recovery from fire. Further work subject to results of PhD study completed 1998 (Prisca Eser). Fernbird survey 1999. Plant species list

1999.

Last Update: April 2000 Bibliography: Unknown

Value: Historic: 2 Conservation: 2 Recreation: 3

Values:

Site Name: Tongariro River No. 2 Conservation Unit No.: 60030

Status: Scenic Reserve

Area (ha): 48.9200 File Reference: RES 046

Area Office: Turangi/Taupo Map Reference: T19 539 399

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

Legal Description: Section 4, Block IV, Pihanga

Survey District and Section 15, Block XI, Puketi Survey

District.

Special Conservation Adjacent to internationally significant trout fishery river; regenerating totara

and beech forest, kowhai and kanuka forest on island. Block includes Mangamawhitiwhiti Stream which is important brown trout spawning stream.

**Earth Data:** River terrace, pumice and greywacke, alluvium.

Flora: Pine plantations (Douglas fir (Pseudotsuga menziesii), larch), red beech-mountain

or black beech forest, kowhai-kanuka forest, toetoe tussockland, manuka

scrub.

Fauna: Most common forest birds. Seasonal use by kereru. Kereru, kaka, tui prolific

when kowhai in flower. Blue duck seen occasionally in autumn/winter (dispersing juveniles). Long-tailed bat recorded nearby in 1991. Seasonal use

by long-tailed/shining cuckoo.

Fishery Values: Internationally significant trout fishery (brown and rainbow). Common

indigenous freshwater fish present.

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa.

**Historic Resources:** Traditional trout fishing site.

Site Numbers Present: 6602, 6603

**Recreation:** Fishing high, walking high, picnicking moderate, mountain biking high,

swimming high, rafting moderate, kayaking high. Urban fringe natural

remnant 20%, rural natural remnant 80%.

Facilities: Tongariro Walkway and fishery access tracks. On-site information panels.

Major Jones swingbridge. Track information signs.

Animal Pests: Possums - bovine Tb endemic, pigs in low numbers, mustelids, rabbits, wasps

(seasonal nuisance).

Plant Pests: Climbing spindle berry (Celastrus orbiculatus), broom (Cytisus scoparius),

cotoneaster, blackberry, firethorn (*Pyracantha*), Japanese honeysuckle (*Lonicera japonica*), poplars, old man's beard. Refer Tongariro/Taupo Problem Plant

Strategy.

**Fences:** Fences along eastern boundary require maintenance.

Access: State Highway 1. Footbridge (Major Jones) from Koura Street, Tongariro

River.

Various guiding permit	Concessions:	Various	s guiding permits
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Other Issues: Very high visitor use area. Some walker-cyclist conflict on track. Some

angler/rafter/kayaker conflict. Horse riding damaging track. Toxic poisons

are a more effective way to combat bovine Tb.

Management Priority: Manage diverse use and classification of Tongariro River sites in an intergrated

fashion. Improve and maintain recreational facilities. Implement recreation survey (1992) recommendations. Manage Mangamawhitiwhiti pine plantation - and revegetate after logging. Continue track maintenance to high standard.

Management Work Done: Ongoing possum control by Waikato Regional Council - ground trapping since

winter 1992. Rhodamine trial in February 1998 successful. Tongariro Walkway upgrade 1994. Recreation survey for Tongariro Power Development resource consents in 1992. Control of climbing spindle berry (Celastrus orbiculatus) 1998, Japanese honeysuckle (Lonicera japonica) and old man's beard. Mangamawhitiwhiti pines logged, ongoing revegetation work and pine seedling control. Lookout track realigned after Tongariro River Floods. Ongoing structure inspections and upgrades. Ongoing fence maintenance. Control of climbing spindle berry (Celastrus orbiculatus)/old man's beard (1998 – ongoing).

Last Update: April 2000 Bibliography: Unknown

Value:	Historic:	3	Conservation:	1	Recreation:	1

Site Name: Tongariro River Conservation Unit No.: 60032

Status: Scenic Reserve

Area (ha): 160.3200 File Reference: RES 046

Area Office: Turangi/Taupo Map Reference: T19 545 370

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

Legal Description: Sections 1 and 3, Block IV,

Pihanga Survey District.

**Special Conservation** Adjacent internationally significant trout fishery river. Kowhai-kanuka forest.

Values:

Earth Data: River terrace, yellow/brown pumice soils and alluvium.

Flora: Kowhai-kanuka forest, red beech-mountain or black beech forest, kanuka-

manuka scrub, bracken fernland, cabbage tree forest.

Fauna: Most common forest birds. Seasonal use by kereru, blue duck seen on

Tongariro River occasionally in autumn/winter (dispersing juveniles). NZ falcon. Long-tailed bat recorded nearby in 1991. Seasonal use by long-tailed

cuckoo, shining cuckoo. Tui prolific when kowhai flowers.

Fishery Values: Internationally significant trout fishery on Tongariro River. Whitikau Stream

highest value spawning stream in fishery. Koaro spawning.

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

**Historic Resources:** Traditional trout fishing site.

Site Numbers Present: 6602, 8112

**Recreation:** Fishing high, walking high, mountain biking high, hunting low, rafting high,

kayaking high. Rural natural 100%.

Facilities: Walking tracks, fishery access tracks, footbridge at Red Hut. Information

signs.

Animal Pests: Possums - bovine Tb endemic, pigs, occasional deer (red and sika), wasps a

problem late summer/autumn, mustelids, rabbits.

Plant Pests: Willow, blackberry, broom (Cytisus scoparius), wilding pines. Refer

Tongariro/Taupo Problem Plant Strategy.

**Fences:** Fences on eastern farm boundary require maintenance.

Access: Footbridge at Red Hut (from State Highway 1). Tongariro River. Access by

lease agreement over private Maori land at Red Hut car park (annual fee paid).

Concessions: Various guiding permits.

Other Issues: Recreation conflict. Agreement between iwi/the department regarding

crossing of private land to DOC reserves. Toxic poisons are a more effective

way to combat bovine Tb.

Management Priority: Resolve visitor conflicts. Continue track maintenance. Parts of track

(Tongariro River Walkway) need upgrade. Plant pest control, manage use and

classification of Tongariro River Reserves in an integrated fashion.

Management Work Done: Possum control by Waikato Regional Council - ground trapping since winter

1992. Rhodamine trials February 1998 successful. Recreation survey in 1992 (for Tongariro Power Development consents process). Ongoing walkway maintenance including realignment and refencing of sections after 1998 floods. Provision of angler access. Aerial 1080 in 1999. Ongoing fence surveys.

Ongoing structure surveys.

Last Update: April 2000 Bibliography: Unknown

Value	Listoria.	2	Consormation	1	Dograntion	1	İ
Value:	Historic:	3	Conservation:	1	Recreation:	1	Ĺ

Site Name: Paurini Conservation Unit No.: 60033

Status: Scenic Reserve

Area (ha):18.3177File Reference:RES 001Area Office:Turangi/TaupoMap Reference:T19 535 395

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

Legal Description: Ohuanga North 2B2A Block,

Ohuanga North, III, IV Pihanga Survey District.

**Special Conservation** Adjacen

Values:

Adjacent internationally significant trout fishing river.

Earth Data: River terrace.

Flora: Manuka scrub, kowhai-kanuka forest.

Fauna: Most common forest birds. Fernbird possible, long-tailed bat. Seasonal use

by long-tailed cuckoo, shining cuckoo. Waterfowl in small wetland. NZ

falcon.

Fishery Values: Internationally significant trout fishery (brown and rainbow). Common

indigenous freshwater fish present.

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Unknown
Site Numbers Present: 8106, 8121

**Recreation:** Fishing medium, walking low, rafting moderate, kayaking high. Rural natural

remnant 100%.

Facilities: Access road to Tongariro River. Road frontage sign.

Animal Pests: Possums - bovine Tb endemic, occasional pigs, mustelids.

Plant Pests: Broom (Cytisus scoparius), gorse, blackberry, heather (Calluna vulgaris), buddleia,

Himalayan honeysuckle (Lewesteria formosa), firethorn (Pyracantha), cotoneaster,

wilding pines. Refer Tongariro/Taupo Problem Plant Strategy.

Fences: Nil

**Access:** State Highway 1, Tongariro River.

Concessions: Nil

Other Issues: Toxic poisons are a more effective way to combat bovine Tb.

Management Priority: Manage to protect and enhance conservation values. Develop new track along

true left bank of Tongariro River. Subject to successful landowner negotiation further up river. Manage use and classification of Tongariro reserves in an

intergrated fashion.

Management Work Done: Ongoing possum control by Waikato Regional Council - ground trapping since

winter 1992. Entrance sign to reserve. Plant pest spraying on road frontage.

Last Update: April 2000 Bibliography: Unknown

Value: Historic: 3 Conservation: 2 Recreation: 2

Site Name: Waikari Conservation Unit No.: 60034

Status: Scenic Reserve

Area (ha):8.9000File Reference:RES 001Area Office:Turangi/TaupoMap Reference:T19 534 397

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

**Legal Description:** Section 7, Block III, Pihanga Survey District.

**Special Conservation** Adjacent to internationally significant trout fishing river. Riverbank forest in

Values: good condition.

Earth Data: River terrace.

Flora: Kowhai-kanuka forest, fivefinger-kohuhu forest, manuka scrub, Dracophyllum

scrub.

Fauna: Most common forest birds, fernbird, NZ falcon, quail.

Fishery Values: Internationally significant trout fishery (brown and rainbow). Common

indigenous freshwater fish present.

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Unknown
Site Numbers Present: 8105

**Recreation:** Fishing high, walking low, mountain biking low, rafting moderate, kayaking

high. Significant use by off-road motorcycles. Urban fringe natural remnant

50%, rural natural 50%.

Facilities: Fishing tracks. Road frontage sign.

Animal Pests: Possums - bovine Tb endemic, mustelids, rabbits, occasional red deer, pigs.

Plant Pests: Broom (Cytisus scoparius), gorse, firethorn (Pyracantha), poplars, cotoneaster.

Refer Tongariro/Taupo Problem Plant Strategy.

**Fences:** Not applicable.

Access: State Highway 1, Tongariro River.

Concessions: Nil

Other Issues: Track damage by motorcycles. Toxic poisons are a more effective way to

combat bovine Tb. Dumping of waste in conflict with angler values.

Management Priority: Manage use and classification of Tongariro River sites in integrated fashion.

Management Work Done: Ongoing possum control by Waikato Regional Council - ground trapping since

winter 1992. Track maintenance for anglers. Name change from Admirals

Scenic Reserve as part of the Turangitukua Claim settlement.

Last Update: April 2000
Bibliography: Unknown

Value: Historic: 3 Conservation: 2 Recreation: 2

Site Name: Waikari Conservation Unit No.: 60035

Status: Recreation Reserve

 Area (ha):
 56.0303
 File Reference:
 RES 001

 Area Office:
 Turangi/Taupo
 Map Reference:
 T19 534 405

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

Legal Description: Section 8, Block III, Pihanga

Survey District and sections 36, 37, 38 and 39, Block VI,

Turangi Suburban.

**Special Conservation** Adjacent to internationally significant trout fishing river. Riverbank forest in

Values: good condition.

Earth Data: River terrace.

Flora: Kowhai-kanuka forest, fivefinger-kohuhu forest, manuka scrub, Dracophyllum

scrub.

Fauna: Most common forest birds, fernbird.

Fishery Values: Internationally significant trout fishery (brown and rainbow). Common

indigenous freshwater fish present.

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

**Historic Resources:** Pumice pit. Alleged pauper gravesite for local community.

Site Numbers Present: 8110

**Recreation:** Fishing high, walking low, mountain biking low, rafting moderate, kayaking

high. Urban fringe natural remnant 50%, rural natural 50%. Significant use by

off-road motorcycles.

Facilities: Access road (metal), fishing access tracks. Road frontage sign.

**Animal Pests:** Possums - bovine Tb endemic, mustelids.

Plant Pests: Broom (Cytisus scoparius), gorse, blackberry, heather (Calluna vulgaris), buddleia,

Himalayan honeysuckle (Leycesteria formosa), firethorn (Pyracantha). Refer

Tongariro/Taupo Problem Plant Strategy.

Fences: Nil

**Access:** State Highway 1.

Concessions: Nil

Other Issues: Toxic poisons are a more effective way to combat bovine Tb. Manage diverse

use and classification of Tongariro River in an integrated fashion. Angler conflicts with other visitors, adjacent property owners encroaching on reserve with gardens, rubbish, stormwater. Motorcycle, 4WD damage. Name change

as part of Turangitukua settlement.

Management Priority: Form track to link Kutai Street with metalled access road at pumice pit as part

of track development on true left bank of Tongariro River. Protect riverbank

vegetation.

Management Work Done: Ongoing possum control by Waikato Regional Council - ground trapping since

winter 1993. Plant pest control by spraying. Drain cleaning 1997. Ongoing day-to-day management. Name change from Admirals Recreation Reserve as

part of the Turangitukua Claim settlement.

Last Update: April 2000 Bibliography: Unknown

Value: Historic: 3 Conservation: 2 Recreation: 2

Site Name: Stump Bay Conservation Unit No.: 60036

Status: Recreation Reserve

Area (ha): 179.2310 File Reference: RES 048

Area Office: Turangi/Taupo Map Reference: T19 547 455

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

**Legal Description:** Sections 13 and 14, Block XI,

Puketi Survey District and Lot

1 DP 55749.

**Special Conservation** Wetland, presence of bladderwort (*Utricularia australis*). **Values:** 

. ......

Earth Data: Flat wetland bordering shore of Lake Taupo. Pumice beach ridges and peaty

soils.

Flora: Baumea peat bog, raupo reedland, manuka scrub.

Fauna: Most common forest birds. Outstanding wetland habitat supporting

important populations of bittern, spotless crake, fernbird and wide range of

waterfowl.

**Fishery Values:** Protection of lake fishery habitat. Fishing from Lake Taupo shore.

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Unknown

Site Numbers Present: Nil

**Recreation:** Gamebird hunting moderate. Rural natural 100%.

Facilities: Nil

Animal Pests: Possums - bovine Tb endemic, goats escaped from farm on Graces Road,

stock, mustelids.

Plant Pests: Grey willow, crack willow. Refer Tongariro/Taupo Problem Plant Strategy.

**Fences:** Unfenced in main. Fences generally inadequate.

Access: Over private land from State Highway 1 and Graces Road. Lakeshore foot

access right of way. Boat access from Lake Taupo.

Concessions: Nil

Other Issues: Much of area burnt in 1993. Toxic poisons are a more effective way to

combat bovine Tb.

Management Priority: Protect biodiversity. Control animal pests. Safeguard vegetation following

fire, exclude stock. Re-fence southern boundaries to protect from stock. Manage use consistent with other Tongaririo River reserves. Attempt willow

control.

Management Work Done: Possum control along boundaries to south by Waikato Regional Council (1080

poison) since winter 1992. Plots set up to monitor recovery from fire 1993. Animal Health Board funded 1080 aerial drop 1000 ha from delta to Motuoapa August 1998. Goat control. Further management work subject to results of PhD wetland study completed 1998 (Prisca Eser). Fernbird survey

1999. Plant species list 1999.

Last Update: April 2000 Bibliography: Unknown

Value: Historic: 2 Conservation: 2 Recreation: 3

Value:

Site Name: Waimarino River 60037 **Conservation Unit No.:** Status: Recreation Reserve 61.2972 Area (ha): File Reference: **RES 056** Area Office: T19 570 483 Turangi/Taupo Map Reference: Place: Taupo Basin Management Plan: No Local Authority: Taupo District Council **Ecological District:** Taupo Legal Description: Sections 8, 9 and 10, Block VII, Puketi Survey District. **Special Conservation** Black beech at base of headland, survivor of Lake Taupo eruption, wetland, Values: bladderwort (Utricularia australis), snails (Wainuia clarki). Wetland, lagoon, beach ridges, rhyolite dome. Earth Data: Flora: Black beech forest, kanuka forest, kowhai-kanuka forest, fivefinger-kohuhu forest, Baumea peat bog, raupo reedland, Carex-Juncus sedge rushland, Eleocharis sedgeland. Fauna: Outstanding wetland habitat containing fernbird, bittern, spotless crake, banded rail, wide range of waterfowl, snails (Wainuia clarki). Lakeshore fishing (Lake Taupo). Fishery Values: Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa. **Historic Resources:** Pa (T19 204), stake alignment (T19 205), open pits (T19 206). Site Numbers Present: 8115 Recreation: Hunting low, gamebird hunting moderate, boating low, swimming low, waterskiing moderate, picnicking low. Rural natural 100%. Facilities: Nil **Animal Pests:** Possums, occasional red deer, sambar deer shot in 1971, goats, rabbits, mustelids. **Plant Pests:** Grey and crack willows. Refer Tongariro/Taupo Problem Plant Strategy. Fences: Nil Access: State Highway 1, boat access, lakeshore right of way foot access. Nil **Concessions:** Other Issues: Unauthorised vehicle access is causing damage - presumed to be anglers. Protect biodiversity. Restrict vehicle access to reserve. Control willows. **Management Priority:** Management Work Done: Pussy/crack willow poison trial 1992/1993. Goat control 1996 - 1998 by ground hunting and aerial (DOC). Animal Health Board funded possum control 1080 aerial drop 1000 ha from delta to Motuoapa August 1998. Snail transects established 1998. Full plant survey 1999. Last Update: April 2000 Bibliography: Unknown

1

Conservation:

**Historic:** 

2

Recreation:

2

Site Name: Waiotaka Conservation Unit No.: 60038

Status: Scenic Reserve

 Area (ha):
 29.1899
 File Reference:
 RES 056

 Area Office:
 Turangi/Taupo
 Map Reference:
 T19 563 462

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

**Legal Description:** Sections 7 and 12, Block VII,

Puketi Survey District.

Special Conservation Cabbage trees and kowhai-kanuka forest on 'dune ridges' in wetland, wetland

Values: associations.

Earth Data: Flat wetland bordering shore of Lake Taupo, beach ridges, pumice and

greywacke alluvium.

Flora: Baumea peat bog, raupo reedland, manuka scrub, kowhai-kanuka forest, flax-

toetoe tussockland.

Fauna: Most common forest birds. Outstanding wetland habitat supporting

important populations of bittern, spotless crake, fernbird and wide range of

waterfowl.

**Fishery Values:** Protection of lake fishery habitat. Lakeshore fishing. **Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Unknown
Site Numbers Present: 8113

**Recreation:** Boating high, fishing high, swimming moderate, walking moderate, picnicking

moderate, windsurfing moderate, gamebird hunting moderate. Rural natural

100%.

Facilities: Four-wheel-drive fishing access track to Waiotaka River, road frontage sign.

**Animal Pests:** Possums, rabbits, mustelids.

Plant Pests: Blackberry, grey and crack willow, Juneus articulatus, gorse, broom (Cytisus

scoparius), lupin (Lupinus), Himalayan honeysuckle (Leycesteria formosa). Refer

Tongariro/Taupo Problem Plant Strategy.

Fences: Not applicable.

Access: State Highway 1, Frethey Drive, boat access via recreation reserve

administered by Taupo District Council.

Concessions: Nil

Other Issues: Taupo District Council manage car park/open space/club building/boat

ramp.

Management Priority: Protect biodiversity, improve public education (good site for wetland

boardwalk). Control willow.

Management Work Done: Willow poisoning, plant pest spraying, entrance sign. Some Environment

Waikato possum control works since 1994. Animal Health Board funded 1080

aerial drop 1000 ha from delta to Motuoapa August 1998.

Last Update: April 2000 Bibliography: Unknown

Value: Historic: 3 Conservation: 2 Recreation: 2

Site Name: Whakamaru Conservation Unit No.: 60039

Status: Marginal Strip

Area (ha): 20.4000 File Reference: RES 028

Area Office: Turangi/Taupo Map Reference: T17 590 035

Place: Taupo Basin Management Plan: No

Local Authority: Taupo District Council Ecological District: Atiamuri

Legal Description: Crown land adjoining Section 31, Block XI, Whakamaru

Survey District.

Special Conservation

Values:

Unknown

Earth Data: River terrace, generally sound.

Flora: Adjacent landowners (Brunts) carrying out revegetation programme.

Fauna: Most common forest birds. Waterfowl along lakeshore.

Fishery Values: Moderate lakeshore angling values.

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa and Ngati Tahu.

Historic Resources: Unknown

Site Numbers Present: Nil

**Recreation:** Boating moderate, picnicking low, swimming low. Rural 100%.

Facilities: Boat ramp, picnic areas/open space, access road.

Animal Pests: Possums, rabbits, goats, mustelids, pigs (seasonal).

Plant Pests: Broom (Cytisus scoparius), gorse, blackberry. Spanish heath. Refer

Tongariro/Taupo Problem Plant Strategy.

Fences: Adjacent landowners (Brunts) carrying out fencing programme.

Access: Adjacent Pokuru Road.

Concessions: Nil

Other Issues: Severe erosion – encroachment of marginal strip into private land as river/lake

edge erodes. Stock trespass.

Management Priority: Full general survey required.

Management Work Done: Goat control, monitoring by the department. Fencing/planting (erosion

control). Possum trapping and ground control. Ongoing possum control.

Last Update: April 2000
Bibliography: Unknown

Value: Historic: 3 Conservation: 3 Recreation: 3

Site Name: Okama Stream Conservation Unit No.: 60040

Status: Marginal Strip

 Area (ha):
 67.7000
 File Reference:
 RES 028

 Area Office:
 Turangi/Taupo
 Map Reference:
 T17 635 035

Place: Taupo Basin Management Plan: No

Local Authority: Taupo District Council Ecological District: Atiamuri

Legal Description: Crown land adjoining sections

14 and 35 and part Section 22, Block IX, Atiamuri Survey District. Crown land adjoining sections 2, 20 and 21, Block XII, Atiamuri Survey District. Crown land adjoining sections 1, SO58694, 3, 5, 6 and 7, Block XII, Whakamaru Survey

District.

Special Conservation Prominence in landscape. Dominant rock landform. Landscape protection.

Values: Regenerating forest, water quality, stream protection.

Earth Data: Deep gorge, steep soils on Whakamaru ignimbrite.

Flora: Broadleaved species scrub. Bracken fernland. Mature and regenerating

podocarp.

Fauna: Limited habitat for forest birds but plentiful. Fernbird likely. Waterfowl on

lake edge.

Fishery Values: Low. Conservation value in protecting water quality for Lake Whakamaru.

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Unknown
Site Numbers Present: 6424

**Recreation:** Fishing low. Rural natural 100%.

Facilities: Nil

**Animal Pests:** Possums, stock, goats, mustelids, pigs.

Plant Pests: Pines, broom (Cytisus scoparius), gorse, blackberry. Refer Tongariro/Taupo

Problem Plant Strategy.

Fences: Poorly fenced along adjoining farm boundaries. Northern end in need of

replacement. Fence replacement. Western side poorly fenced.

Access: From State Highway 30 on to Pokuru Road.

Concessions: Nil

Other Issues: Confusion over area defined as marginal strip. Farm boundaries

(identification), large pine trees damaging boundary fences when falling. Illegal

huts.

Management Priority: Remove pines. Fence site. Maintain zero goat densities.

Management Work Done: Fencing. Annual site inspection. Possum hunters, aerial poison drop 1996.

New reserve signs. Possum control by Waikato Regional Council. Last 1080 aerial operation 1996. Major goat control. Pine logging March 1997. Goats

reduced to low number

Last Update: April 2000
Bibliography: Unknown

Value: Historic: 3 Conservation: 2 Recreation: 3

Site Name:	Tongariro Forest	Conservation Unit No.:	60042			
Status:	Conservation Area					
Area (ha):	21470.7746	File Reference:	FOP 011			
Area Office:	Ruapehu	Map Reference:	S19 260 350			
Place:	Plateau Forests	Management Plan: No				
Local Authority:	Ruapehu District Council Ecological District: Tongariro					
Legal Description:	Various					
Special Conservation Values:	Ecological areas, wetlands, Hall's totara-kaikawaka forest, cabbage tree forest, kahikatea forest, limestone areas and associated vegetation, red beech relics, rata forest, red tussock, <i>Pittosporum turneri</i> , woodrose ( <i>Dactylanthus taylori</i> ). Northern brown kiwi, blue duck, diverse recreation. Okupata Caves are the only limestone caves in conservancy. Kiwi Recovery Programme.					
Earth Data:	Divided between two geological formations. Swamp forms boundary. Southeast Tongariro ring plain. North-west sedimentary Wanganui series.					
Flora:	Mixed podocarp forest, mixed podocarp-broadleaved species forest, beech-mixed podocarp forest, cabbage tree forest, kaikawaka-Hall's totara forest, northern rata-rimu forest, kamahi forest, tawa-podocarp forest, red beech forest, kaikawaka-mountain toatoa forest, permanent red tussockland in frost hollows, <i>Baumea</i> peat bog, pink or silver or bog pine-mountain toatoa forest, kahikatea forest, exotic plantings, pasture. All forest types extensively logged.					
Fauna:	Most common forest birds, kaka, kereru, NZ falcon, kakariki, robin and rifleman. Important brown kiwi population in central region (30-40 pairs). Eels, native fish and glow-worms in caves and cave streams, blue duck in all major rivers and streams. Seasonal use by long-tailed cuckoo and shining cuckoo. Long-tailed bat present, short-tailed bat possible. Fernbird in scrub associations.					
Fishery Values:	Backcountry wilderness fishing in Wanganui and Whakapapa rivers and tributaries. Significant indigenous fish populations.					
Tangata Whenua Issues:	Information held in the domain of Ngati Rangi and Ngati Tuwharetoa.					
Historic Resources:	Burial site. Canoe remains in Whanganui headwaters. Represents considerable human activity relating to tribes' interaction. Timber milling mill sites, road cuttings, tramlines, logging roads. Steam shovel, slab hut.					
Site Numbers Present:	6238, 6240, 6251, 6252, 6254, 6255, 6262, 6263, 6264, 6265, 6266, 6267, 6275, 6279, 6374					
Recreation:	Hunting high, mountain biking high, fishing moderate, horse riding low, four-wheel-drive motor biking, moderate, walking low, caving high, multi-sport eventing high, education activities moderate. Rural 2%, rural natural 0.6%, backcountry drive-in 21.4%, backcountry four-wheel-drive 62%, backcountry walk-in 1%, remote 13%.					
Facilities:	Metalled two-wheel-drive access roads 24 km, walking tracks 5 km, large network of off-road vehicle trails/tracks (100 km) and entrance signs at major access points (42 Traverse fully marked). Campsites, picnic areas and carparks. Illegal hunters' huts.					

Animal Pests: Possums abundant - bovine Tb endemic, red deer in low-moderate numbers,

goats to north-west and south, pigs in localised areas, hares, cattle trespass on

margins, mustelids.

Plant Pests: Pinus contorta, broom (Cytisus scoparius), heather (Calluna vulgaris), gorse,

buddleia, blackberry, Himalayan and Japanese honeysuckle (Lonicera japonica), large stand of exotic trees. Climbing spindle berry (Celastrus orbiculatus). Refer

Tongariro/Taupo Problem Plant Strategy.

Fences: Mostly fenced along farm boundaries to south and north-west. Some work to

be completed.

Access: State highways 47 and 4. Via Right of Way Easements – A on DP 74276

(access to Avondale College Camp and OPC Taurewa lease), B and C on DP 72521, A, B, D, G, H and J on DP 73297, B and C on DP 73779 (John MacDonald and Pukehinau roads), A on DP 72521 (Kapoors Road). Network

of DOC roads within the Conservation Area.

Concessions: TT/052/COM - Genesis, TT/202/STR - Landcorp Farming Ltd,

TT/167/STR, TT/009/INS - Sir Edmund Hillary Outdoor Pursuits Centre of New Zealand, TT/183/STR – Avondale College, TT/182/EAS - Mangatepopo Camp School, TT/046/GUI - Kiwi Outback Tours, TT/168/GUI - Taupo Quad Adventures, TT/012/GUI - Whakanui Te Mana O Te Waione and various guiding, transport, beehive and one-off event

permits.

Other Issues: Illegal huts, access in some ecologically sensitive areas. Off-road vehicle use

has the potential to continue causing adverse effects on the physical environment and conflict with other users. Fencing along Landcorp Taurewa

boundary. Dog use in important kiwi area.

Management Priority: Rationalise recreation facilities. Manage parts of area for four-wheel-drive,

motor bike, mountain bike and horse activity. Regenerate logged forest, protect biodiversity, control animal pests. Restoration. Assess natural and historic resources. Manage nationally significant kiwi population using Operation Nest Egg and integrated pest control. Protect woodrose

(Dactylanthus taylori) and rata from possum browse.

Management Work Done: Goat control, possum control by Manawatu-Wanganui Regional Council. Last

1080 operation winter 1996. Residual trap catch 5% in winter 1999. Kiwi research, blue duck monitoring/management, *Pinus contorta* control. Possum browse monitoring traverse established in 1994. Maintenance of existing recreation facilities, particularly two-wheel-drive roads and bridges. Marking and promtion of 42 Traverse in 1993. Landscape and recreation development plan undertaken in 1993. Inventory of trout fishing in upper Whanganui. DOC roading hierarchy for Tongariro Forest prepared and approved 1997. Kiwi management includes egg removal, chick rearing (exsitu) and re-release into forest when grown. Twenty one chicks released as at April 2000.

Mustelid research project. Visitor asset management.

Last Update: April 2000

Bibliography: Miles, J.B.G., et al., Northern brown kiwi (Apteryx australis) in Tongariro

National Park and Tongariro National Park - ecology and threats, DOC

Tongariro/Taupo Conservancy, 1997

Value: Historic: 1 Conservation: 1 Recreation: 1

Site Name: Taurewa Conservation Unit No.: 60042/1

Status: Ecological Area

 Area (ha):
 19074.8035
 File Reference:
 FOP 011

 Area Office:
 Ruapehu
 Map Reference:
 \$19 200 365

Place: Plateau Forests Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Tongariro

Legal Description: Various

**Special Conservation** Refer conservation unit number 60042. Largest kiwi population in central

**Values:** North Island requiring high level of protection.

Earth Data: Hills, uplifted block, Oligocene limestone and sandstone, Jurassic sediments,

fault scarp, yellow/brown pumice soils and loams, podzolized in places.

Flora: Matai/miro hardwood forest, rata podocarp tawa forest, podocarp hardwood

forest. Exotic forestry plantation plots, scattered wilding eucalypts.

Fauna: Most common forest birds, kaka, kereru, NZ falcon, kakariki and robin.

Important brown kiwi population. Blue duck in all major rivers and streams. Seasonal use by long-tailed shining cuckoo and long-tailed bat. Fernbird

present.

Fishery Values: Backcountry wilderness fishing in Wanganui and Whakapapa rivers and

tributaries. Significant indigenous fish populations.

Tangata Whenua Issues: Information held in the domain of Ngati Rangi and Ngati Tuwharetoa.

Historic Resources: Unknown

**Site Numbers Present:** Refer conservation unit 60042.

**Recreation:** Unknown

**Facilities:** Telecommunication site.

Animal Pests: Possums abundant - bovine Tb endemic, red deer, goats, pigs, cattle trespass,

mustelids.

Plant Pests: Scattered Pinus contorta, wilding eucalypts. Refer Tongariro/Taupo Problem

Plant Strategy.

Fences: Not applicable - river boundaries - mixed condition (mainly poor).

Access: Kapoors Road (four-wheel-drive).

Concessions: Refer conservation unit 60042.

Other Issues: Helipads, hunting access or roads. Telecommunications aerial. The

department wants hunting but adjacent farmer prohibiting access. Dog use.

Future concessions, exotic forest logging.

Management Priority: Protect kiwi population. High conservation values so much flora/fauna

protection work being undertaken. Access issues require ongoing intensive

management.

Management Work Done: Goat control since 1989, aerial 1080 carrot possum operation June 1995. Kiwi

research and management, blue duck monitoring. Vegetation monitoring. Six ungulate exclosure plots established 1997. Possum browse index established. Survey for short-tailed bats unsuccessful in 1997/1998. Plant species list 1999.

Last Update: April 2000

**Bibliography:** Refer conservation unit 60042.

Value: Historic: 2 Conservation: 1 Recreation: 2

Site Name: Otamawairua **Conservation Unit No.:** 60042/2 Status: Conservation Area 1598.3977 FOP 011 Area (ha): File Reference: Area Office: S19 235 350 Ruapehu Map Reference: Place: Plateau Forests Management Plan: No Local Authority: Ruapehu District Council **Ecological District:** Tongariro Legal Description: Various **Special Conservation** Red tussockland, significant Pittosporum turneri population. Wetlands. Values: Earth Data: Eroded valley and spurs, Miocene sediments mainly yellow/brown loams, podzolized in places. Flora: Red tussockland in forest hollows, pink/silver/bog pine, mountain toatoa forest, kaikawaka forest. Fauna: Most common forest birds, kereru, NZ falcon and robin. Fernbird, seasonal use by long-tailed and shining cuckoo, long-tailed bat, kiwi. Nil Fishery Values: Tangata Whenua Issues: Information held in the domain of Ngati Rangi. **Historic Resources:** Old logging tracks, tramlines. Site Numbers Present: Refer conservation unit 60042. Recreation: Mountain biking, hunting, motorbiking low. Rural 19%, backcountry drive-in 23%, backcountry four-wheel-drive 58%. Facilities: 4WD tracks. **Animal Pests:** Possums abundant - bovine Tb endemic, red deer,occasional cattle trespass. Scattered goats, pigs (seasonal), mustelids. **Plant Pests:** Pinus contorta, broom (Cytisus scoparius), heather (Calluna vulgaris), buddleia. Refer Tongariro/Taupo Problem Plant Strategy. Fences: Regular cattle trespass through 'longpoint' (Landcorp Taurewa). Access: Kapoors Road. **Concessions:** Refer conservation unit 60042. Other Issues: Increasing concessionaire demand. Management Priority: Refer conservation unit 60042. Management Work Done: Aerial 1080 possum control by Manawatu/Wanganui Regional Council 1995.

Last Update: April 2000

Bibliography: Refer conservation unit 60042.

1 2 Value: **Historic:** Conservation: Recreation:

department. Refer conservation unit number 60042.

Pittosporum turneri monitoring, kiwi monitoring. Ongoing goat control by the

Site Name: Okupata Conservation Unit No.: 60042/3

Status: Conservation Area

 Area (ha):
 294.2570
 File Reference:
 FOP 011

 Area Office:
 Ruapehu
 Map Reference:
 \$19 265 340

Place: Plateau Forests Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Tongariro

Legal Description: Various

Special Conservation Woodrose (Dactylanthus taylori), kiwi. Okuputa Caves limestone stacks,

Values: outcrops and associated vegetation.

Earth Data: Valley and ridge system, Miocene and Jurassic limestones, sandstone,

conglomerate, yellow/brown pumice soils and loams, podzolized in places,

older ring plain.

Flora: Matai dominant podocarp hardwood forest, pink/silver/bog pine mountain

toatoa forest, kaikawaka mountain beech/toatoa forest, regenerating kahikatea.

Fauna: Most common forest birds, kereru, kaka, NZ falcon, kakariki, fernbird and

robin. Remnant brown kiwi population. Seasonal use by long-tailed/shining cuckoo, long-tailed bats, blue duck. Native fish habitat. Glow-worms, eels,

native fish species in caves.

Fishery Values: Nil

Tangata Whenua Issues: Information held in the domain of Ngati Rangi.

**Historic Resources:** Milling (1930s-1950s).

**Site Numbers Present:** Refer conservation unit 60042.

**Recreation:** Caving moderate, mountain biking moderate, walking low, motorbiking, four-

wheel-drive moderate, hunting moderate. Backcountry drive-in 65%,

backcountry four-wheel-drive 35%.

Facilities: Walking track, roads.

Animal Pests: Possums abundant - bovine Tb endemic, red deer, occasional cattle trespass,

pigs (seasonal), mustelids.

Plant Pests: Buddleia, *Pinus contorta*. Refer Tongariro/Taupo Problem Plant Strategy.

Fences: Good.

Access: John McDonald Road.

**Concessions:** Refer conservation unit 60042.

Other Issues: High regular use of ecologically sensitive areas by authorised concessionaire

puts pressure on a fragile system. Roads, public use of caves.

Management Priority: Refer conservation unit 60042. Protection of water quality, management of

caves and cave use.

Management Work Done: Maintaining access and blue duck monitoring. Refer conservation unit 60042.

Ongoing possum control by Manawatu/Wanganui Regional Council.

Last Update: April 2000

Bibliography: Cunningham, A., Okupata, Pukehinau: Tongariro State Forest recreational

development proposals, New Zealand Forest Managers, Wanganui, 1986

Value: 2 Conservation: 1 Recreation: 2

Site Name: Canyon Limestone Country Conservation Unit No.: 60042/4

Status: Conservation Area

 Area (ha):
 980.0000
 File Reference:
 FOP 011

 Area Office:
 Ruapehu
 Map Reference:
 \$19 270 400

Place: Plateau Forests Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Tongariro

Legal Description: Various

Special Conservation Okupata Caves, limestone stacks and outcrops and associated vegetation, only

Values: limestone caves in district. Kiwi, blue duck.

Earth Data: Canyon valley system, bluffs, Miocene and Jurassic sandstones and limestones,

yellow/brown pumice soils and loams, podzolized in places.

Flora: Logged mixed podocarp-broadleaved species forest, exotics (scattered

plantations).

Fauna: Most common forest birds, brown kiwi, blue duck, kereru and NZ falcon.

Seasonal use by long-tailed/shining cuckoo, long-tailed bat, fernbird.

Fishery Values: Backcountry wilderness fishing in Wanganui and Whakapapa rivers and

tributaries. Significant indigenous fish populations.

Tangata Whenua Issues: Information held in the domain of Ngati Rangi.

Historic Resources: Milling, old logging roads.

**Site Numbers Present:** Refer conservation unit 60042.

**Recreation:** Caving moderate, mountain biking low, hunting moderate, tubing rafting and

fishing low, walking moderate, motorbiking four-wheel-drive low. Backcountry drive-in 31%, backcountry four-wheel-drive 54%, backcountry

walk-in 15%.

**Facilities:** Roads, picnic area, campsite, caves track.

Animal Pests: Possums abundant - bovine Tb endemic, red deer, pigs (seasonal), hares,

minor population of goats in Waione basin, mustelids widespread.

Plant Pests: Pinus contorta, broom (Cytisus scoparius), heather (Calluna vulgaris), gorse,

buddleia, honeysuckle, wildling eucalypts. Refer Tongariro/Taupo Problem

Plant Strategy.

Fences: Not applicable.

Access: Pukehinau Road.

**Concessions:** Refer conservation unit 60042.

Other Issues: Mining rights for limestone quarrying. Concession for four-wheel-drive quad

tours and horse treks. Exotic forest logging.

Management Priority: Refer conservation unit 60042. Retain stauts quo.

Management Work Done: Blue duck monitoring. *Pinus contorta* control. Goat control. Upgrade track

entrance. Track and structure upgrade.

Last Update: April 2000

Bibliography: Refer conservation unit 60042.

2 2 Historic: **Conservation:** 1 Recreation: Value:

Site Name: Waipapaiti Conservation Unit No.: 60042/5

Status: Conservation Area

Area (ha): 1400.0000 File Reference: FOP 011

Area Office: Ruapehu Map Reference: T19 310 390

Place: Plateau Forests Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Tongariro

Legal Description: Various

Special Conservation

Values:

Cabbage tree forest, red beech relic, wetland with intact ecotone margin, kiwi.

Earth Data: Older Rangipo ring plain, other andesite, Miocene sandstone and siltstone,

podzolized yellow/brown pumice soils and loams.

Flora: Cabbage tree forest, logged mixed podocarp, broadleaved species forest, red

beech stand, wetland.

Fauna: Most common forest birds, kaka, kereru, NZ falcon and robin. Remnant

brown kiwi population. Seasonal use by long-tailed/shining cuckoo, long-

tailed bat, fernbird, blue duck.

Fishery Values: Backcountry wilderness fishing in Wanganui and Whakapapa rivers and

tributaries. Significant indigenous fish populations. Limited trout fishery

values.

Tangata Whenua Issues: Information held in the domain of Ngati Rangi.

Historic Resources: Milling /tramlines etc..

**Site Numbers Present:** Refer conservation unit 60042.

**Recreation:** Hunting low, four-wheel-drive low, mountain biking low, fishing low, rafting

low. Outdoor Pursuits Centre guided groups, caving, orienteering, rope skill courses etc. Backcountry drive-in 18%, backcountry four-wheel-drive 79%,

backcountry walk-in 3%.

Facilities: Roads.

Animal Pests: Possums abundant - bovine Tb endemic, red deer, pigs (seasonal), mustelids

widespread.

Plant Pests: Refer Tongariro/Taupo Problem Plant Strategy.

Fences: Not applicable.

Access: Access Road No. 3.

Concessions: Refer conservation unit 60042.

Other Issues: Power scheme, dams, low flows.

Management Priority: Refer conservation unit 60042.

Management Work Done: Refer conservation unit 60042 – woodrose (Dactylanthus taylori) protection.

Environment Waikato possum control (aerial 1080) winter 1997.

Last Update: April 2000

**Bibliography:** Refer conservation unit 60042.

Value: Historic: 2 Conservation: 2 Recreation: 2

Site Name: Dominion Milled Forest Conservation Unit No.: 60042/6A

Status: Conservation Area

 Area (ha):
 5610.0000
 File Reference:
 FOP 011

 Area Office:
 Ruapehu
 Map Reference:
 \$19 220 420

Place: Plateau Forests Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Tongariro

Legal Description: Various

**Special Conservation** 

Values:

Kiwi and blue ducks present.

Earth Data: Sloping plateau and ridge and valley systems, fault scarp, Jurassic greywacke,

Miocene limestone and sandstone, podzolized composite yellow/brown loams

and pumice soils.

Flora: Heavily logged mixed broadleaved species forest with remnant emergent

podocarps, manuka scrub, toetoe grassland, exotics.

Fauna: Most common forest birds, kaka, kereru, NZ falcon and robin, blue duck.

Remnant brown kiwi population.. Seasonal use by long-tailed/shining cuckoo,

fernbird, long-tailed bat.

Fishery Values: Backcountry wilderness fishing in Wanganui and Whakapapa rivers and

tributaries. Significant indigenous fish populations.

**Tangata Whenua Issues:** Information held in the domain of Ngati Rangi.

Historic Resources: Old pa site, old travel route from Kakahi to Waihi, logging (roads). Old

hunters' huts.

**Site Numbers Present:** Refer conservation unit 60042.

Recreation: Hunting moderate, motorbiking low, mountain biking moderate, horse

trekking low, camping low, fishing low, rafting/canoeing low. Backcountry

drive-in 14%, backcountry four-wheel-drive 82%, remote 4%.

Facilities: Bridges, camping area, roads.

Animal Pests: Possums abundant - bovine Tb endemic, red deer, goats, pigs, hares on skid

sites and tracks, stock trespass, mustelids.

Plant Pests: Pinus contorta, broom (Cytisus scoparius), heather (Calluna vulgaris), gorse,

buddleia, honeysuckle, exotics. Refer Tongariro/Taupo Problem Plant

Strategy.

**Fences:** Satisfactory - northern boundary.

Access: Dominion Road.

**Concessions:** Refer conservation unit 60042.

Other Issues: Owhango water supply. Maintenance of access (track clearance by private

people - hunters/mountain bikers). Firewood removal.

Management Priority: Maintain status quo, monitor access.

Management Work Done: Goat control since 1989, aerial 1080 possum control winter 1996.

Last Update: April 2000

Bibliography: Refer conservation unit 60042.

Historic: Value: 2 **Conservation:** Recreation: 2

Site Name: Okupata Milled Forest Conservation Unit No.: 60042/6B

Status: Conservation Area

 Area (ha):
 3200.0000
 File Reference:
 FOP 011

 Area Office:
 Ruapehu
 Map Reference:
 \$19 265 370

Place: Plateau Forests Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Tongariro

Legal Description: Various

Special Conservation Kiwi, blue duck, woodrose (Dactylanthus taylori), lower Waione area of unlogged

Values: forest.

Earth Data: Older Rangipo ring plain and dissected Jurassic, Oligocene, Miocene

sandstone, siltstone and limestone, mainly podzolized yellow/brown loams

and pumice soils.

Flora: Heavily logged mixed podocarp broadleaved species forest, various exotic

plantings.

Fauna: Most common forest birds, kereru, NZ falcon, kaka, robin and fernbird,

brown kiwi, blue duck. Lizards of unknown species. Seasonal use long-

tailed/shining cuckoo, long-tailed bat.

Fishery Values: Backcountry wilderness fishing in Wanganui and Whakapapa rivers and

tributaries. Significant indigenous fish population. Limited trout fishing and

indigenous fish populations.

Tangata Whenua Issues: Information held in the domain of Ngati Rangi.

**Historic Resources:** Mill sites, associated logging activities (tramlines, road formations, cuttings).

**Site Numbers Present:** Refer conservation unit 60042.

Recreation: Hunting moderate, tramping low, horse trekking low, mountain biking

moderate, trail biking low, fishing low, rafting low, camping low.

Facilities: Roads, mill site, camp, huts.

Animal Pests: Possums abundant - bovine Tb endemic, red deer, pigs in low numbers, hares,

goats, mustelids.

Plant Pests: Pinus contorta, broom (Cytisus scoparius), heather (Calluna vulgaris), gorse,

buddleia, honeysuckle, exotics. Refer Tongariro/Taupo Problem Plant

Strategy.

**Fences:** Boundary fences with Taurewa farm poor condition.

Access: Kapoors road, Pukehinau Road

Concessions: Refer conservation unit 60042.

Other Issues: Increasing concessions, stock trespass, firewood removal, deer poaching, land

claim.

**Management Priority:** Refer conservation unit 60042. Protect water quality.

Management Work Done: Aerial 1080 carrot poisoning operation in southern sector June 1995, blue

duck monitoring. Kiwi (Operation Nest Egg) management since 1996. Refer

conservation unit 60042.

Last Update: April 2000

Bibliography: Refer conservation unit 60042.

Value: Historic: **Conservation:** Recreation:

Site Name: Piopiotea Conservation Unit No.: 60042/7

Status: Conservation Area

 Area (ha):
 250.0000
 File Reference:
 FOP 011

 Area Office:
 Ruapehu
 Map Reference:
 \$19 175 255

Place: Plateau Forests Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Tongariro

Legal Description: Various

Special Conservation Woodrose (Dactylanthus taylori), short-tailed bat, amenity reserve between

Values: Tongariro National Park and Erua Forest.

Earth Data: Waimarino ring plain, mainly podzolized yellow/brown pumice soils and

loams.

Flora: Cut-over bush - logged regenerating podocarp forest.

Fauna: Most common forest birds, kakariki, NZ falcon, kiwi.

Fishery Values: Trout, koura, eels.

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa and the Whanganui

tribes.

Historic Resources: General logging.

Site Numbers Present: Refer conservation unit 60042.

Recreation: Hunting low, walking low.

Facilities: Nil

Animal Pests: Goats, deer, possums, hares, mustelids.

Plant Pests: Pinus contorta, heather (Calluna vulgaris), ragwort (Senecio jacobaea), gorse. Refer

Tongariro/Taupo Problem Plant Strategy.

**Fences:** Good condition - east and southern side (Landcorp boundary).

Access: State Highway 4.

**Concessions:** Refer conservation unit 60042.

Other Issues: Old dump closed in 1977 - leaching. Catchment for Raurimu water supply.

Fire hazard from railway.

**Management Priority:** Protect biodiversity, control pests, maintain fences.

Management Work Done: Goat control, ongoing possum control. Manawatu-Wanganui Regional

Council. Last aerial 1080 operation, autumn 1995.

Last Update: April 2000

**Bibliography:** Refer conservation unit 60042.

Value: Historic: 2 Conservation: 2 Recreation: 3

Value:

Site Name: Conservation Unit No.: Whakapapa 60042/8 Status: Conservation Area File Reference: FOP 011 Area (ha): Area Office: Ruapehu Map Reference: S19 220 260 Place: Plateau Forests Management Plan: No Local Authority: Ruapehu District Council **Ecological District:** Tongariro Legal Description: Various **Special Conservation** Wetlands, adjoining link between Tongariro National Park/Conservation Area Values: and Erua Forest. Kiwi. Earth Data: Waimarino ring plain, gorge, minor Miocene sandstone/siltstone, mainly podzolized yellow/brown pumice soils, some loams. Flora: Large portion logged over – regenerating beech and podocarp forest. Wetland areas. Fauna: Most common forest birds, NZ falcon, blue duck, kiwi. Seasonal use by kaka and kakariki. Refer conservation unit 60042. Fishery Values: Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa. General logging. **Historic Resources:** Site Numbers Present: Refer conservation unit 60042. Recreation: Four-wheel-drive low, duck shooting. Rural 2%, backcountry drive-in 37%, backcountry four-wheel-drive 61%. **Facilities:** Kiwi signs on road. **Animal Pests:** Goats, deer, rats, cats. **Plant Pests:** Pinus contorta, gorse. Refer Tongariro/Taupo Problem Plant Strategy. Fences: Boundary fences. State Highway 47. Access: **Concessions:** Refer conservation unit 60042. Other Issues: Boundary fences. Refer conservation unit 60042. Management Priority: Management Work Done: Historic hut restoration. Manawatu/Wanganui Regional Council 1080 drop May 1995. Fencing 1991. Ongoing goat control. Last Update: April 2000 Refer conservation unit 60042. Bibliography:

1

**Historic:** 

**Conservation:** 

1

Recreation:

2002 - 2012

3

Site Name: Forest Blocks and Pasture Conservation Unit No.: 60042/9

Covenants

**Status:** Conservation Area

 Area (ha):
 900.0000
 File Reference:
 FOP 011

 Area Office:
 Ruapehu
 Map Reference:
 \$19 190 270

Place: Plateau Forests Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Tongariro

Legal Description: Various

**Special Conservation** 

Values:

Wetland of significant regional importance.

Earth Data: Waimarino ring plain, gorges, mostly podzolized yellow/brown pumice soils

and loams.

Flora: Wetland, isolated podocarp forest blocks.

Fauna: Seasonal use by NZ falcon, kaka, kakariki, blue duck in rivers.

**Fishery Values:** Refer conservation unit 60042.

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Kaikawaka slab hut restored. Old logging history.

**Site Numbers Present:** Refer conservation unit 60042.

Recreation: Hunting low. Rural natural 11%, backcountry drive-in 89%.

Facilities: Nil

**Animal Pests:** Possums, goats, pigs, mustelids.

Plant Pests: Pinus contorta, broom (Cytisus scoparius), gorse. Refer Tongariro/Taupo Problem

Plant Strategy.

Fences: Varying quality boundary fences.

Access: State Highways 4 and 47 over Landcorp property - legal access up through

farm.

**Concessions:** Refer conservation unit 60042.

Other Issues: Nil

Management Priority: Restore indigenous state through maintenance of boundary fences and

ongoing pest management.

Management Work Done: Ongoing goat control, fencing. Manawatu/Wanganui Regional Council

possum control 1080 operation May 1995.

Last Update: April 2000

**Bibliography:** Refer conservation unit 60042.

Value: Historic: 3 Conservation: 3 Recreation: 3

Site Name: Landcorp Pasture Conservation Unit No.: 60042/10

Status: Conservation Area

Area (ha): File Reference: FOP 011

Area Office: Ruapehu Map Reference: S19 200 210

Place: Plateau Forests Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Tongariro

Legal Description: Various

Special Conservation

Values:

Earth Data:

Murimotu, Waimarino and dissected Rangipo ring plains, minor other

andesites and Miocene siltstone and sandstone, yellow/brown pumice soils

and loams, many podzolized.

Flora: Open grassland.

Fauna: Seasonal use by common forest birds, NZ falcon, kiwi etc. Waterfowl.

**Fishery Values:** Refer conservation unit 60042.

Nil

Tangata Whenua Issues: Land claim in progress (Waimarino claim).

Historic Resources: Unknown

**Site Numbers Present:** Refer conservation unit 60042.

Recreation: Nil

**Facilities:** Water supply catchment - hydro intake, farm facilities.

Animal Pests: Hares, red deer, goats, possums, mustelids.

Plant Pests: Pinus contorta. Refer Tongariro/Taupo Problem Plant Strategy.

**Fences:** Various condition boundary fences.

**Access:** State Highway 4 and 47 across private land.

**Concessions:** Refer conservation unit 60042.

Other Issues: Land claim on Taurewa and possible sale.

Management Priority: Refer conservation unit 60042.

Management Work Done: Pinus contorta removal, goat control, aerial 1080 autumn 1995.

Manawatu/Wanganui Regional Council.

Last Update: April 2000

**Bibliography:** Refer conservation unit 60042.

Value: Historic: 3 Conservation: 3 Recreation: 3

Site Name: Pine Forest/Rayonier Crown Conservation Unit No.: 60042/11

Lease

**Status:** Conservation Area

Area (ha): File Reference: FOP 011

Area Office: Ruapehu Map Reference: S19 275 325

Place: Plateau Forests Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Tongariro

Legal Description: Various

**Special Conservation** Wetlands of significant regional importance.

Values:

Earth Data: Dissected Rangipo ring plain, Miocene, sandstone and siltstone, mainly

podzolized yellow/brown pumice soils and loams.

Flora: Wetlands, pine plantation with wetlands in between.

Fauna: Seasonal use by common forest birds, waterfowl, pheasants (gamebirds) quail.

**Fishery Values:** Refer conservation unit 60042.

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

**Historic Resources:** Old mill site (tramlines) steam shovel.

**Site Numbers Present:** Refer conservation unit 60042.

**Recreation:** Refer conservation unit 60042. Caving, mountain biking, four-wheel-driving,

fishing. Backcountry drive-in. OPC use. Hunting.

**Facilities:** Roads, hydro scheme (drop shafts).

**Animal Pests:** Cats, stoats, rats, goats, deer, pigs, mustelids.

Plant Pests: Pinus contorta, buddleia. Refer Tongariro/Taupo Problem Plant Strategy.

Fences: Fenceline on Kapoors Road.

Access: John McDonald Road.

**Concessions:** Refer conservation unit 60042.

Other Issues: Hydro - no flow. Rayonier Crown lease.

Management Priority: Refer conservation unit 60042.

Management Work Done: Road maintenance, culverts, blue duck survey. South portion subject to

regional council possum control operation, winter 1995.

Last Update: April 2000

**Bibliography:** Refer conservation unit 60042.

Value: 2 Conservation: 1 Recreation: 2

Site Name: Whakaipo Bay Conservation Unit No.: 60044

Status: Scenic Reserve

 Area (ha):
 545.6753
 File Reference:
 RES 075

 Area Office:
 Turangi/Taupo
 Map Reference:
 T18 657 755

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

**Legal Description:** Sections 10, 16 and 17, Block

II. Section 1, Block III and Section 46, Block IV, Tuhingamata East Survey

District.

Special Conservation Soil and water protection values. Scenic backdrop to Lake Taupo. Large

Values: population of woodrose (Dactylanthus taylori), ongaonga, kowhai, ngaio present.

Whakaipo Bay uplifted lake benches have regional geopreservation significance.

significance.

Earth Data: Steep rhyolite bluffs at lake edge, undulating dome from bluffs.

Yellow/brown pumice soils and loams.

Flora: Fivefinger-kohuhu forest, bracken fernland, kamahi forest, kowhai-kanuka

forest.

Fauna: Most common forest birds. NZ falcon, seasonal use by kereru. Black-backed

gull roosts/nests on bluffs. Range of waterfowl along lakeshore.

**Fishery Values:** Moderate, lakeshore trout fishing.

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

**Historic Resources:** Waahi tapu sites in cliffs/cliff top. Part of post Lands and Survey block.

Site Numbers Present: Nil

**Recreation:** Hunting low, fishing moderate. Backcountry drive-in 100%.

Facilities: Nil

Animal Pests: Possums - bovine Tb endemic, low numbers of red deer, goats since 1988 now

in very low numbers, pigs (seasonal), mustelids.

Plant Pests: Gorse, broom (Cytisus scoparius), pines, crack willow. Refer Tongariro/Taupo

Problem Plant Strategy.

**Fences:** Completely fenced on farm boundaries.

Access: Lake access.

Concessions: Nil

Other Issues: Nil. Potential for Lake Taupo walkway through area.

Management Priority: Retain scenic value of shoreline, allow regeneartion sequence to occur

naturally, protect woodrose (Dactylanthus taylori). Remove pines. Protect water

quality for fisheries.

Management Work Done: Ongoing possum control by Waikato Regional Council. Last aerial 1080

operation 1994. Goat control. Removal of wilding pines. Fencing on northwestern boundary 1989. Woodrose (*Dactylanthus taylori*) survey and protection (caging). Fencing inventory 1999. Western Lake Reserves comprehensive

plant species list (1999).

Last Update: April 2000 Bibliography: Unknown

Value: 2 Conservation: 1 Recreation: 3

Site Name: Whakaipo Bay Conservation Unit No.: 60045

Status: Recreation Reserve

 Area (ha):
 300.0006
 File Reference:
 RES 075

 Area Office:
 Turangi/Taupo
 Map Reference:
 T18 675 755

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

**Legal Description:** Sections 24 and 47, Block IV,

Tuhingamata East Survey

District.

**Special Conservation** Spawning stream, gully protection.

Values:

Earth Data: Gradual ascent from lake edge. Steep erosion gully and old lakeshores.

Pumice alluvium.

Flora: Fivefinger-kohuhu forest, kowhai-kanuka forest, bracken fernland, pine

plantation (Douglas fir (Pseudotsuga menziesii)). Pasture.

Fauna: Limited habitat available but most forest birds present in patches of native

forest. Waterfowl along lake edge. Quail present in exotic forest.

**Tangata Whenua Issues:** Mapara Stream high trout and koaro spawning value.

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa.

**Historic Resources:** Urupa at stream mouth.

Site Numbers Present: 6410

**Recreation:** Picnicking day use high, fishing high. Rural 100%.

Facilities: Access road (pumice) two kilometres, Girl Guide camp, two public toilets,

boat launching facilities (2, dinghy). Sealed vault toilets, picnic table. Walking

track from Mapara Stream to Tahunatara Pt.

Animal Pests: Possums - bovine Tb endemic, rabbits, hares, goats low (mainly in exotics),

mustelids, cats, wasps, pigs (seasonal).

Plant Pests: Broom (Cytisus scoparius), blackberry, willows, pines, gorse, brier rose (Rosa

micrantha). Refer Tongariro/Taupo Problem Plant Strategy.

Fences: Well fenced.

Access: From Mapara Road to lake.

Concessions: TT/011/GRA – Olsen and TT/142/STR - Mapara Pony Club, TT/056/STR

- Girl Guides Society, one-off events/activities.

Other Issues: Lease of 72.48 ha of Whakaipo 1D for conservation purposes.

Management Priority: Retain remote recreation values. Protect gully. Improve passive recreation

facilities near lakeshore. Investigate development of self-registration camping

ground.

Management Work Done: Ongoing possum control by Waikato Regional Council. Ground

trapping/poisoning since 1970s. Fencing of eastern boundary. Restoration, planting, plantation maintenance/clear felling, wilding pine control. Road upgrading, goat control work, new toilets installed 1993. Mapara Stream bridged. Track connecting 60045 to 60073. Access cattle stops. Rubbish collection. Signs – control/interpretation. Fire control work 1991. Plant pest control. Mowing access way. Seasonal patrol work twice weekly in peak season. Logging of exotic pines completed 1996. Continuing planting.

Construction of track. Fencing inventory 1999.

Last Update: April 2000
Bibliography: Unknown

Value: Historic: 1 Conservation: 2 Recreation: 3

Site Name: Oruatua Conservation Unit No.: 60046

Status: Conservation Area

Area (ha): 80.8400 File Reference: RES 041

Area Office: Turangi/Taupo Map Reference: T18 609 505

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

**Legal Description:** Parts Tauranga-Taupo 1B1

Block.

**Special Conservation** Kowhai, wetlands, shoreline herbfields.

Values:

**Earth Data:** Flat, lakeside feature. Pumice alluvium.

Flora: Kanuka forest, kanuka-manuka scrub, shoreline turf herbfield, fivefinger-

kohuhu forest, raupo reedland, Carex-toetoe tussockland, frostflat lichenfield.

Fauna: Most common forest birds. Seasonal use by kereru. Range of waterfowl along

lakeshore.

Fishery Values: Low

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

Historical pa site.

Site Numbers Present: 6610, 6611, 6613

**Recreation:** Picnicking moderate, boating moderate, walking moderate. Rural 100%.

**Facilities:** Sealed vault toilet, boat ramp, tracks, signs.

Animal Pests: Possums - bovine Tb endemic, rabbits, mustelids.

Plant Pests: Broom (Cytisus scoparius), willows, blackberry, brier rose (Rosa micrantha),

Japanese honeysuckle (Lonicera japonica), old man's beard, Himalayan honeysuckle (Leycesteria formosa), pines. Refer Tongariro/Taupo Problem Plant

Strategy.

**Fences:** Fenced on southern and eastern boundaries.

Access: State Highway 1 or Oruatua Road, Tauranga-Taupo River mouth, or Te Heu

Heu Parade.

**Concessions:** TT/171/GRA - C. Branch and TT/054/GRA - G. Taylor.

Other Issues: Adjoining property owners encroaching onto reserve with gardens, rubbish

and access clearance.

Management Priority: Monitor old man's beard, remove brier rose (Rosa micrantha), ringbark pines in

central clearing. Investigate vesting urban part of reserve in Taupo District

Council. Maintain recreation facilities.

Management Work Done: Ongoing possum control by Waikato Regional Council. Trapping, ground

poisoning since winter 1991. Plant pest control. Recreation facility

maintenance. New toilet installed 1993.

Last Update: April 2000 Bibliography: Unknown

3 2 2 Historic: **Conservation:** Recreation: Value:

Site Name: Pakuri Conservation Unit No.: 60047

Status: Scenic Reserve

Area (ha): 32.8900 File Reference: RES 079

Area Office: Turangi/Taupo Map Reference: U17 792 919

Place: Taupo Basin Management Plan: No

Local Authority: Taupo District Council Ecological District: Atiamuri

**Legal Description:** Section 2, Block VI, Tatua

Survey District.

Special Conservation Mature rimu, matai. Representative of regenerating lowland forest cover in

Values: this region.

Earth Data: Steep east-facing slope, ignimbrite.

Flora: Mixed podocarp-broadleaved species forest, fivefinger-kohuhu forest – logged.

**Fauna:** Most common forest birds. Seasonal use by kereru.

Fishery Values: Nil

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa and Ngati Tahu.

Historic Resources: Unknown

Site Numbers Present: Nil

**Recreation:** Hunting low. Rural natural 100%.

Facilities: Nil

**Animal Pests:** Possums, stock, mustelids, rabbits, hares.

Plant Pests: Pines, blackberry, broom (Cytisus scoparius). Refer Tongariro/Taupo Problem

Plant Strategy.

**Fences:** Fenced but maintenance required to stock-proof northern boundary.

Access: Off Tram Road, over private property (by way of easement)

Concessions: Nil

Other Issues: Maintenance/upgrade of access road - wash-outs.

Management Priority: Prevent stock access. Control possums.

Management Work Done: Woodrose (Dactylanthus taylori) survey completed 15 September 1992. DOC

possum control 1993. Fence repair. DOC bait stations for possums

(ongoing). Aerial 1080 treatment winter 1994 - Environment Waikato.

Last Update: April 2000
Bibliography: Unknown

Value: Historic: 3 Conservation: 3 Recreation: 3

Site Name: Aratiatia Conservation Unit No.: 60048

Status: Conservation Area

Area (ha): 233.4171 File Reference: RES 001

Area Office: Turangi/Taupo Map Reference: U17 822 828

Place: Taupo Basin Management Plan: No

Local Authority: Taupo District Council Ecological District: Atiamuri

**Legal Description:** Part Sections 2 and 11, Block

XI, Tatua Survey District. Part Oruanui North East No. 2 Block. Part Tauhara North Block and closed road in blocks X and XI, Tatua

Survey District.

**Special Conservation** River protection. Soil water. Fishery protection. Protection of scenic value of

Values: Aratiatia Rapids.

Earth Data: River terrace, pumice alluvium.

Flora: Fivefinger-kohuhu forest, bracken fernland, pasture, pine plantation.

Fauna: Most common forest birds. Waterfowl along river. NZ falcon, quail,

pheasants.

**Fishery Values:** Trout fishing. Gut Creek spawning stream.

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa and Ngati Tahu.

**Historic Resources:** Travel route. High level of modification through power project development.

Site Numbers Present: Nil

Recreation: Boating high (Huka Jet). Gamebird hunting low. Fishing low, equestrian

centre, river boat. Gazetted walkway. Walking high. Mountain biking high. Sightseeing high. Aratiatia Rapids viewing platform. Rural natural remnant

10%. Rural 90%.

Facilities: Access roads, walking tracks (Huka-Aratiatia Walkway), equestrian centre.

Animal Pests: Possums, goat escape problem from adjoining farm between 1987-1992,

rabbits, hares, cats, mustelids.

Plant Pests: Blackberry, broom (Cytisus scoparius), wilding pines, brier rose (Rosa micrantha),

gorse, monkey musk (Mimulus). Refer Tongariro/Taupo Problem Plant

Strategy.

**Fences:** Well fenced where required.

Access: Off Aratiatia Road, off Rapid Road, off State Highway 5.

**Concessions:** TT/062/GRA - NZ Horse Society.

Other Issues: Gamebird hunting on Lake Aratiatia. Aratiatia Village site negotiation.

Handing back of site to Maori people. Rubbish problem. Erosion of river bank. Poaching of Gut Stream for trout. Vandalising of vehicles at public parks. Dumping of wrecked vehicles. Vandalism of facilities. Possible pony

club lease of old village site.

Management Priority: Protect/enhance Waikato River and environs. Advocate regarding waterway

use. Maintain visitor facilities. Provide interpretation sites. Monitor monkey

musk (Mimulus) in Gut Creek.

Management Work Done: Goat control by the department. Fencing. Pine removal. Maintenance of

recreation facilities. Water supply to toilet upgrade. Plant pest spraying.

Track and facility maintenance high. Goats eradicated.

Last Update: April 2000 Bibliography: Unknown

Value: Historic: 3 Conservation: 2 Recreation: 2

Site Name: Lake Rotokawa Conservation Unit No.: 60049

Status: Conservation Area

Area (ha): 203.2450 File Reference: RES 081

Area Office: Turangi/Taupo Map Reference: U17 875 810

Place: Taupo Basin Management Plan: No

Local Authority: Taupo District Council Ecological District: Atiamuri

Legal Description: Part Tauhara North No. 1

Block.

Special Conservation Thermal vegetation. Geothermal features - lake water features (streams).

Values: Banded dotterel, pied stilts, black-backed gulls nesting. Lake Rotokawa has

national geopreservation significance.

Earth Data: Geothermal lake and margins, undulating landscape over Huka Formation.

Flora: Sparse thermal vegetation; flax, rush, sedgelands grading into kanuka/manuka,

mingimingi shrubland.

Fauna: Most common forest birds, NZ falcon and kereru. Black-backed gulls. Range

of waterfowl on lake. Quail.

Fishery Values: Nil

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa.

**Historic Resources:** Waterfowl as food source for Maori people. Opencast sulphur mining.

Site Numbers Present: 6425

**Recreation:** Gamebird hunting moderate. Rural 100%.

Facilities: Nil

**Animal Pests:** Possums, rabbits, stock, mustelids.

Plant Pests: Gorse, blackberry, pines. Refer Tongariro/Taupo Problem Plant Strategy.

**Fences:** Fencing in poor condition. Fencing on some boundaries.

Access: Off Broadlands Road through Tasman Forestry. Informal agreement with

Maori landowners.

Concessions: Nil

Other Issues: No public access to site. Major site restoration required. Duck shooting

control access. Maimai ballot system. Academic interest in geothermal values. Interest in sulphur mining, silica mining/extraction. Effect of adjacent geothermal power development. Adjoining Landcorp land transferred to iwi control. Access allowed through iwi land for management purposes. Iwi wish

to reclaim ownership.

Management Priority: Formalise public access. Restore landform. Monitor site. Assess conservation

values. Remove pines. Investigate upgrading status of ecologically significant

parts of area to scientific reserve.

Management Work Done: Possum control by Waikato Regional Council 1988. Botanical report by B.

Clarkson 1990. Major resource consents hearing to protect conservation values. Boundary survey. Major site restoration completed. Lakeshore fenced to stop machinery access. Possum control operation and trapping 1994

onwards (DOC). Ongoing investigative work by universities.

Last Update: January 2001 Bibliography: Unknown

Value: Historic: 3 Conservation: 2 Recreation: 3

Site Name: Waikato River Conservation Unit No.: 60050

Status: Conservation Area

Area (ha): 63.1615 File Reference: RES 011

Area Office: Turangi/Taupo Map Reference: U18 796 786

Place: Taupo Basin Management Plan: No

Local Authority: Taupo District Council Ecological District: Atiamuri

**Legal Description:** Parts Tauhara Middle Block.

**Special Conservation** Soil and water protection/erosion.

Values:

Earth Data: Two steep deep gully systems leading to Waikato River. Flat terrace.

Flora: Fivefinger-kohuhu forest, bracken fernland, pasture.

**Fauna:** Most common forest birds.

Fishery Values: Nil

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa and Ngati Tahu.

Historic Resources: Unknown
Site Numbers Present: 6438

**Recreation:** Target/Claybird shooting. Rural natural 100%.

Facilities: Drop structure for stormwater control. Taupo Clay Target Club.

**Animal Pests:** Possums, cats, mustelids, rats, rabbits, hares.

Plant Pests: Blackberry, wilding pines, broom (Cytisus scoparius), Himalayan honeysuckle

(Leycesteria formosa), gorse. Refer Tongariro/Taupo Problem Plant Strategy.

Fences: Well fenced.

Access: Taupo Clay Target Club via Centennial Drive.

Concessions: TT/064/STR - Taupo Clay Target Club Inc., TT/162/EAS - Taupo District

Council, TT/175/EAS – Fletcher Woodpanels Ltd.

Other Issues: Outfall of stormwater to 'nursery stream', quality and localised impact, gully

erosion.

Management Priority: Clear-fell wilding pines. Monitor stormwater quality and impacts on gully

system. Control gully erosion on following major wash-outs. Possum control.

Management Work Done: Fencing. New drop structure (Fletcher Wood Panels). Monitoring of

stormwater. Possum control (trap, poison).

Last Update: April 2000 Bibliography: Unknown

Value: Historic: 3 Conservation: 3 Recreation: 2

Fishery Values:

Site Name: Conservation Unit No.: Kaimanawa 60051 Status: Forest Park 77887.7446 FOP 003 Area (ha): File Reference: Area Office: Turangi/Taupo Map Reference: T19, T20, U19 Place: Kaimanawa-Moawhango Management Plan: Yes **Local Authority:** Taupo and Rangitikei District **Ecological District:** Kaimanawa Councils Legal Description: Various **Special Conservation** Three mistletoe species (Peraxilla colensoi, P. tetrapetala and Alepis flavida), Values: tussockland - particularly silver - unlogged forest, alpine areas, frostflats on river terraces, recreational hunting (recreational hunting area in north-east, 24000 hectares). Kiwi, kaka, short-tailed bats, snails (Powelliphanta marchanti), blue duck. Earth Data: Uplifted range of Kaimanawa greywacke and schist (Permian-Mesozoic), no fossils. Overlayed with pumice up to 100 metres thick in places. Butts against Tongariro ring plain in west, east Taupo ignimbrite, pumice deposits to north and Wanganui sediments overlain by Tongariro/Taupo ash to south. Flora: Red beech-silver beech forest, fivefinger-kohuhu forest, mountain beech forest, subalpine scrub, alpine herbfield, silver tussockland, red tussockland, manuka scrub, silver beech forest, Dracophyllum scrub, beech-mixed podocarp forest, red tussock-monoao shrubland, riverbed gravelfield, broadleaved species scrub, red beech-rimu forest, red beech-Hall's totara forest, silver beech-mountain beech forest, mountain toatoa scrub, kanuka-manuka scrub, red beech forest, kamahi forest, kanuka forest, red beech-mountain beech forest, toetoe tussockland, mistletoe (Peraxilla colensoi). Fauna: Most common forest birds throughout, kaka, kakariki, NZ falcon, robin and rifleman. Small numbers of kiwi, blue duck in all major rivers and streams. Short-tailed bat recorded. Long-tailed bat common. Snails (Powelliphanta marchanti) in southern catchments. Small scale skink. Range of lizards (geckos and skinks). Seasonal use by long-tailed cuckoo, shining cuckoo, banded

dotterel.

High backcountry fishery values in Mohaka, Rangitikei, Ngaruroro, Moawhango catchments. High habitat values in northerly catchments on to

Lake Taupo.

Tangata Whenua Issues: Traditional Maori travel routes. Information held in the domain of Ngati

Tuwharetoa.

**Historic Resources:** Timber milling - red beech splitting, Waimarino pa, Grace's homestead.

**Site Numbers Present:** 6301, 6303, 6304, 6305, 6306, 6309, 6310, 6312, 6315, 6317, 6319, 6321, 6322,

6323, 6324, 6326, 6329, 6330, 6331, 6332, 6334, 6336, 6338, 6339, 6340, 6341, 6342, 6345, 6348, 6349, 6350, 6351, 6352, 6353, 6356, 6450, 6452, 6453, 6454, 6455, 6456, 6457, 6458, 6459, 6460, 6461, 6462, 6463, 6464, 6465, 6467, 6468,

6469, 6470, 6471, 6473, 6474, 6622, 6623, 6627

#### **Recreation:**

Hunting very high, tramping high, fishing high, picnicking high, kayaking high, rafting high, camping high. Walking moderate, mountain biking moderate. Backcountry drive-in 5%, four-wheel-drive drive-in 4%, backcountry walk-in 7%, remote 82%, wilderness 2%.

Facilities: Refer Kaimanawa Forest Park Management Plan. Tracks, roads, car parks,

toilets, huts, camping areas, signs, helipads, Boyd airstrip.

Animal Pests: Possums - bovine Tb endemic in north-west, sika deer in moderate numbers,

red deer in low-moderate numbers, pigs in low numbers in north, horses in south, hares in all open country, mustelids, cats, occasional feral dogs, rabbits.

Plant Pests: Pinus contorta, gorse, broom (Cytisus scoparius), lupin (Lupinus), old man's beard,

marram grass (Ammophila arenaria), heather (Calluna vulgaris), ragwort (Senecio jacobaea), Himalayan honeysuckle (Leycesteria formosa), grey willows. Refer

Tongariro/Taupo Problem Plant Strategy.

**Fences:** Well fenced along eastern boundary with Poronui Station.

Access: State Highway 5 to Taharua Road. Poled route over private land to Mohaka

River. Clements Road, State Highway 1, Kiko Road. Across private land in Access 10, Tree Trunk Gorge Road, Rangipo intake road, Waipakihi Road.

Concessions: Various guiding and aerial transport permits, non commercial landing permits,

various WARO permits.

Other Issues: Land use activities of neighbouring landowners. Current road access to

western boundary of Kaimanawa Forest Park through private Maori land. Unauthorised commercial aerial transport. Hut fee compliance. Access across private land. Boundary fencing. Tongariro Power Development impact on

blue duck.

Management Priority: Maintain biodiversity. Protect endangered flora, fauna. Provide and maintain

facilities for public use. Control and monitor feral deer herds to balance conservation/use recreation. Improve hut fee compliance. Manage aerial access. Removal of illegal structures/bivouacs, rubbish control. Manage consistent with the Kaimanawa Forest Park Management Plan. Implement a survey to determine the impacts of deer and possums on mountain beech

vegetation.

Management Work Done: Hunter impacts on deer herds well documented (monitored samples).

Vegetation database extensive including seven exclosure plots. Facility provision/maintenance. Plant pest control. Mistletoe banding. Kiwi survey. Summer programme. Patrol compliance work. Hutwardens on an intermittent basis. Impacts of deer herds monitored. Preliminary short-tailed bats survey 1997/1998. Skink/gecko survey 1997. Blue duck monitoring research, advocacy on Tongariro River. Snails (*Powelliphanta marchanti*) surveys 1997/1998. Possum control by Environment Waikato. Aerial 1080 drop winter 1994 in north-west. Wild animal control recovery northern area as part of Tb research programme. *Pinus contorta* eradication programmes 1997/1998, on three year rotation. Ongoing possum control. Mistletoe survey, snail

survey 1999. possum control in snail area in 2000.

Last Update: January 2001

### Bibliography:

Cunningham, A., Wilson, D., A proposal for a Kaimanawa Recreational Hunting Area: draft wild animal control plan., New Zealand Forest Service,

Palmerston North, 1981

Groome, K.H., Simmons, D.G., Recreational Uses in the Kaimanawa and Kaweka Forest Parks., Lincoln University, Department of Horticulture and Landscape Architecture, 1983

Speedy, C., The effects of recreational hunting on mountain beech forest habitat quality in Kaimanawa Forest Park., DOC, Turangi, 1991

Value: Historic: 2 **Conservation:** 1 Recreation: 2

Site Name: Recreational Hunting Area Conservation Unit No.: 60051/1

Status: Forest Park

 Area (ha):
 27400.0000
 File Reference:
 FOP 003

 Area Office:
 Turangi/Taupo
 Map Reference:
 U19 845 375

Place: Kaimanawa-Moawhango Management Plan: Yes

Local Authority: Taupo District Council Ecological District: Kaimanawa

Legal Description: Various

**Special Conservation** An ecological buffer for rest of park. Animals controlled through recreational

Values: hunting. Mistletoe (Peraxilla colensoi), kiwi, kaka, short- and long-tailed bats.

Earth Data: Valleys, ridges, Triassic and Jurassic greywacke, minor ignimbrite and pumice

alluvium, podzolized yellow/brown pumice soils.

Flora: Mixed red/silver beech, hardwood in north, pure mountain beech in south.

Alpine communities in Mangamingi.

Fauna: Kiwi, kaka, bats, common forest birds. Refer conservation unit 60051.

Fishery Values: High backcountry fishery values in Mohaka, Rangitaiki, Ngaruroro,

Moawhango catchments. High habitat values in northerly catchments on to

Lake Taupo.

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Clements Hill beech splitting.

Site Numbers Present: Refer conservation unit 60051.

Recreation: Hunting high, tramping moderate, fishing low, wilderness tramping low,

walking low, camping moderate. Backcountry drive-in 4%, backcountry four-

wheel-drive 3%, backcountry walk-in 7%, remote 86%.

Facilities: Huts, lodges, walking tracks, car parks, camping areas, airstrip, swingbridge at

Hinemaiaia, Kaipo/Tikitiki.

Animal Pests: Red/sika deer, cats, possums, mustelids.

Plant Pests: Gorse, broom (Cytisus scoparius), ragwort (Senecio jacobaea), honeysuckle, heather

(Calluna vulgaris), Pinus contorta around margins. Refer Tongariro/Taupo

Problem Plant Strategy.

Fences: Nil

Access: State Highway 5 to Tauhara Road. Clements Road. Tracks and by air.

**Concessions:** Refer conservation unit 60051.

Other Issues: Unauthorised aerial access. Hut fee compliance, illegal establishment of

temporary bivouacs, rubbish problem, illegal spotlighting, land use activities of neighbours. Boyd block landlocked - issues for adjoining landowners, namely trespass by hunters, Boyd airstrip deteriorating. Te Iringa Hut burned down in

1999.

Management Priority: Maintain biodiversity. Permanent forest monitoring plots, exclude excessive

aerial recreational access. Refer conservation unit 60051.

Management Work Done: Pinus contorta eradication programmes 1997-98 on three-year rotation.

Recreation management, liaison with adjoining landowners, summer programme. Short-tailed bat survey 1997/1998. One exclosure plot at Te Iringa. Maungarangi 40 permanent plots established and remeasured 1979, 1986 and 1999. Extensive monitoring of deer, hunting and forest ecology. Refer conservation unit 60051. Mustelid monitoring. Bat monitoring. New culvert at entrance 1996. Clements Road upkeep. Routine maintenance of

camp areas, grass mowing, rubbish, toilet cleaning.

Last Update: January 2001

**Bibliography:** Refer conservation unit 60051.

Value: Historic: 2 Conservation: 2 Recreation: 2

Site Name: Tiraki Conservation Unit No.: 60051/2

Status: Ecological Area

Area (ha): 2750.0000 File Reference: FOP 003

Area Office: Turangi/Taupo Map Reference: U19 790 410

Place: Kaimanawa-Moawhango Management Plan: Yes

Local Authority: Taupo District Council Ecological District: Kaimanawa

Legal Description: Various

Special Conservation Comprises almost pure red/silver beech forest (overstorey). Mistletoe

Values: (Peraxilla colensoi). Refer conservation unit 60051.

Earth Data: Valleys, ridges, fault block face, Triassic greywacke, ignimbrite, pumice

deposits, podzolized yellow/brown pumice soils.

Flora: Pure red/silver beech forest with extensive kamahi on terraces.

**Fauna:** Most common forest birds. Refer conservation unit 60051.

Fishery Values: High backcountry fishery values in Mohaka, Rangitikei, Ngaruroro,

Moawhango catchments. High habitat values in northerly catchment on to

Lake Taupo.

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Unknown

**Site Numbers Present:** Refer conservation unit 60051.

Recreation: Hunting low, wilderness tramping low. Backcountry drive-in 2%, backcountry

four-wheel-drive 7%, remote 91%.

Facilities: Helicopter landing pad.

Animal Pests: Red/sika deer, possums, cats, occasional wild dog, stoats.

Plant Pests: Ragwort (Senecio jacobaea)/gorse. Refer Tongariro/Taupo Problem Plant

Strategy.

Fences: Nil

Access: Tiraki Road (private), via Lake Taupo Forest, no public access.

**Concessions:** Refer conservation unit 60051.

Other Issues: No roads/tracks through. Access via Clements Road or through Maori land.

Illegal bivouacs, rubbish. Animal control.

Management Priority: Animal pest management – possums. Maintain biodiversity. Protection of

water quality for fishery values.

Management Work Done: Management of wild animals through hunting. Maintenance of two exclosure

plots within catchment. One exclosure plot at Tiraki Stream. A series of subjectively located permanent plots were established in windthrow areas in

1983 to monitor forest ecology.

Last Update: April 2000

**Bibliography:** Refer conservation unit 60051.

Value: Historic: 2 Conservation: 2 Recreation: 2

Site Name: Northern Kaimanawa Conservation Unit No.: 60051/3

**Status:** Forest Park

**Area (ha):** 9580.0000 **File Reference:** FOP 003

Area Office: Turangi/Taupo Map Reference: U19 710 380

Place: Kaimanawa-Moawhango Management Plan: Yes

Local Authority: Taupo District Council Ecological District: Kaimanawa

Legal Description: Various

Special Conservation Mistletoe (Peraxilla colensor)

Values:

Earth Data: Ridges, valleys, Permian schist, Triassic greywacke, minor ignimbrite and

pumice deposits, podzolized yellow/brown pumice soils and loams.

Flora: Red beech, silver beech in east grading to mixed beech, hardwood forest in

west mountain beech at high altitudes. Alpine communities.

**Fauna:** Most common forest birds. Refer conservation unit 60051.

**Fishery Values:** Refer conservation unit 60051.

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

**Historic Resources:** Possibility of old pa sites. Historic homestead.

**Site Numbers Present:** Refer conservation unit 60051.

**Recreation:** Hunting moderate, tramping low, walking moderate, wilderness tramping low,

fishing low, picnicking low.

Facilities: Roads, huts, walking tracks, car park, picnic area, signs.

Animal Pests: Red/sika deer, possums, cats, stoats, mustelids.

Plant Pests: Broom (Cytisus scoparius) around margins. Refer Tongariro/Taupo Problem

Plant Strategy.

Fences: Nil

Access: Kiko Road.

**Concessions:** Refer conservation unit 60051.

Other Issues: Access to be restricted.

Management Priority: Refer conservation unit 60051.

Management Work Done: Facility maintenance. Short-tailed bat survey 1998. 53 permanent plots

established 1980. Mistletoe survey 1999/2000.

Last Update: April 2000

**Bibliography:** Refer conservation unit 60051.

Value: Historic: 2 Conservation: 1 Recreation: 3

Site Name:	Waiotaka		С	onservat	ion Un	it No.:	60051/4		
Status:	Ecological Are	a							
Area (ha):	5800.0000		F	ile Refer	ence:		FOP 003	3	
Area Office:	Turangi/Taupo	)	M	lap Refe	rence:		T19 605	304	
Place:	Kaimanawa-Me	oawhang	o M	Management Plan:			Yes		
Local Authority:	Taupo District	Council	E	cologica	l Distri	ct:	Kaimana	awa	
Legal Description:	Various								
Special Conservation Values:	Unlogged podocarp/hardwood forest. Area of <i>Dacrydium biforme</i> (yellow pine). Woodrose ( <i>Dactylanthus taylori</i> ).								
Earth Data:	Ridges, valleys, fault block face, Triassic greywacke, pumice deposits, podzolized yellow/brown pumice soils and loams.								
Flora:	Mixed beech, podocarp, hardwood forest in north grading to mountain beech at bushline.								
Fauna:	Most common forest birds. Refer conservation unit 60051.								
Fishery Values:	Refer conservation unit 60051.								
Tangata Whenua Issues:	Pa site. Information held in the domain of Ngati Tuwharetoa.								
Historic Resources:	Pa site.								
Site Numbers Present:	Refer conservation unit 60051.								
Recreation:	Fishing low, tramping low, hunting low. Backcountry drive-in 9%, backcountry four-wheel-drive 6%, remote 85%.								
Facilities:	Helicopter land	ling pad.							
Animal Pests:	Red/sika deer, possums, cats, stoats.								
Plant Pests:	Gorse, broom (Cytisus scoparius). Refer Tongariro/Taupo Problem Plant Strategy.								
Fences:	Nil								
Access:	Waiotaka Valley road across private land - through Lake Taupo Forest.								
Concessions:	Refer conservation unit 60051.								
Other Issues:	Some illegal firewood removal.								
Management Priority:	Maintain biodiversity, protect integrity of pa site. Protect water quality for fishery values.								
Management Work Done:	Environment Waikato possum control works, winter 1994. Removal of deer as part of Tb research since 1994 (onwards). Forest monitoring established 2000. Partial plant species list 1999.								
Last Update:	April 2000								
Bibliography:	Refer conservation unit 60051.								
		1		1	1			ı	
Value:	Historic:	2	Conserv	ation:	1	Recr	eation:	3	

Site Name: Ecology Stream Conservation Unit No.: 60051/5

Status: Ecological Area

**Area (ha):** 2500.0000 **File Reference:** FOP 003

Area Office: Turangi/Taupo Map Reference: U19 701 201

Place: Kaimanawa-Moawhango Management Plan: Yes

Local Authority: Taupo District Council Ecological District: Kaimanawa

Legal Description: Various

Special Conservation Prolific mountain beech. Large mistletoe population (Peraxilla tetrapetala), one

Values: Alepis flavida found January 2000.

Earth Data: Valleys, ridges, Triassic greywacke.

Flora: Pure mountain beech forest with alpine communities above bushline.

Fauna: Most common forest birds. Refer conservation unit 60051.

Fishery Values: Part of the headwaters of the important Rangitikei fishing area.

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Unknown

**Site Numbers Present:** Refer conservation unit 60051.

**Recreation:** Tramping low, hunting moderate. Remote 42%, wilderness 58%.

Facilities: Helicopter landing pad, tracks.

Animal Pests: Red/sika deer, possums, cats, mustelids.

Plant Pests: Small patches of broom (Cytisus scoparius). Refer Tongariro/Taupo Problem

Plant Strategy.

Fences: Nil

Access: Access private land through the Rangitikei.

**Concessions:** Refer conservation unit 60051.

Other Issues: Nil

Management Priority: Maintain biodiversity. Protect water quality for fishing values. Helicopter

access for recreational hunters periodically facilitated. Monitor deer

populations.

Management Work Done: Maintenance of deer exclosure plots/monitoring. One deer exclosure plot at

Ecology Stream to monitor deer harvest, impact assessment. Mountain beech

monitoring regime 20m x 20m plots. Full plant species list 1999.

Last Update: April 2000

**Bibliography:** Refer conservation unit 60051.

Value: Historic: 3 Conservation: 1 Recreation: 2

Site Name:	Waipakihi		Conserva	tion Uni	t No.:	60051/6			
Status:	Ecological Area	a							
Area (ha):	900.0000		File Refe	rence:		FOP 003	3		
Area Office:	Turangi/Taupo	)	Map Ref	erence:		T20 506	109		
Place:	Kaimanawa-Mo	oawhang	o Manager	nent Pla	n:	Yes			
Local Authority:	Taupo District	Council	Ecologic	al Distri	ct:	Kaimana	awa		
Legal Description:	Various								
Special Conservation Values:	Silver/mountai	n beech.							
Earth Data:	Valley, gorge, Permian schist, Triassic greywacke, alluvium, yellow/brown loams.								
Flora:	Mixed red/mountain/silver beech forest.								
Fauna:	Refer conservation unit 60051.								
Fishery Values:	Refer conservation unit 60051. Limited trout fishery. Headwaters of the Tongariro River.								
Tangata Whenua Issues:	Information held in the domain of Ngati Tuwharetoa.								
Historic Resources:	Nil								
Site Numbers Present:	Refer conservation unit 60051.								
Recreation:	Hunting moderate, tramping moderate, tramping low. Backcountry walk-in 27%, remote 73%.								
Facilities:	River route. Cl	hannel 6	radio repeater locat	ed on hil	l within e	cological a	rea.		
Animal Pests:	Red/sika deer, possums, cats, mustelids.								
Plant Pests:	Ragwort (Senecio jacobaea). Hawkweed (Hieracium). Refer Tongariro/Taupo Problem Plant Strategy.								
Fences:	Nil								
Access:	Access 10 across private land. State Highway 1 through private land. Waipakihi River valley.								
Concessions:	Refer conservation unit 60051.								
Other Issues:	Ensure management of site reflects the remoteness of the area. Public access up the Waipakihi Valley (true left bank) over private land will become an issue.								
Management Priority:	Refer conservation unit 60051.								
Management Work Done:	Clean up of rubbish in campsites undertaken annually. Short-tailed bat survey 1997. One deer exclosure plot at Ruatahuna.								
Last Update:	April 2000								
Bibliography:	Refer conservation unit 60051.								
	TT'	2			n				
Value:	Historic:	3	Conservation:	2	Kecre	eation:	2		

Land Inventory Sheet									
Site Name:	Rangitikei			Conserva	tion Un	it No.:	60051/7		
Status:	Forest Park								
Area (ha):	12230.0000			File Refer	rence:		FOP 003	3	
Area Office:	Turangi/Taupo			Map Refe	erence:		T20 607	106	
Place:	Kaimanawa-Mo	awhang	О	Managen	nent Pla	n:	Yes		
Local Authority:	Rangitikei Distr	rict		Ecologica	al Distri	ct:	Kaimana	ıwa	
Legal Description:	Various								
Special Conservation Values:	Remote experie	nce zon	e.						
Earth Data:	Cretaceous remnant greywacke schist, peneplain, ridges, valleys, yellow/brown loams and composite pumice soils, recent soils.								
Flora:	Mountain beech forest below bushline. Extensive alpine communities above bushline.								
Fauna:	Refer conservation unit 60051.								
Fishery Values:	Internationally significant trout fishery. Refer conservation unit 60051.								
Tangata Whenua Issues:	Information held in the domain of Ngati Tuwharetoa.								
Historic Resources:	Nil								
Site Numbers Present:	Refer conservation unit 60051.								
Recreation:	Tramping low, fishing low. Hunting moderate. Remote 20%, wilderness 80%.								
Facilities:	Nil								
Animal Pests:	Red/sika deer, possums, cats, mustelids.								
Plant Pests:	Pinus contorta. Refer Tongariro/Taupo Problem Plant Strategy.								
Fences:	Nil								
Access:	Poled route over Defense Reserve. Across private roads, Access 10.								
Concessions:	Refer conservation unit 60051.								
Other Issues:	Maintaining wilderness state of block.								
Management Priority:	Maintain wilderness character. Maintain biodiversity. Plant pest control. Reduce possum impacts on snails ( <i>Powelliphanta marchanti</i> ).								
Management Work Done:	Pinus contorta (removal by air) eradication programmes 1997/1998, on three- year rotation. Clean up of camp sites on Rangitikei River. Two snail (Powelliphanta marchanti) monitoring plots established 1998, surveys 1998. 28 permanent vegetation plots established 1981. Monitor deer impacts, harvest. Possum control over 250 ha to protect snail populations 2000.								
Last Update:	January 2001								
Bibliography:	Refer conservation unit 60051.								
Value:	Historic:	3	Conse	ervation:	2	Recr	eation:	2	

Site Name: Central Kaimanawa Conservation Unit No.: 60051/8

Status: Forest Park

 Area (ha):
 15730.0000
 File Reference:
 FOP 003

 Area Office:
 Turangi/Taupo
 Map Reference:
 T19 600 205

Place: Kaimanawa-Moawhango Management Plan: Yes

Local Authority: Taupo District Council Ecological District: Kaimanawa

Legal Description: Various

Special Conservation Historic site - totara. Pillars of Hercules - Tree Trunk Gorge. Blue duck

Values: population management.

Earth Data: Cretaceous remnant greywacke peneplain valleys, spurs fault block face, oldest

andesite flows, yellow/brown loans and pumice soils mainly podzolized recent

soils.

Flora: Mixed beech-hardwood podocarp forest, extensive alpine communities above

bushline.

**Fauna:** Blue ducks. Refer conservation unit 60051.

**Fishery Values:** Refer conservation unit 60051.

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

**Historic Resources:** Sacred totara tree.

**Site Numbers Present:** Refer conservation unit 60051.

Recreation: Hunting and tramping moderate, walking moderate, sightseeing moderate,

mountain biking moderate, rafting high, fishing moderate, camping moderate. Backcountry drive-in 8%, backcountry four-wheel-drive 4%, backcountry

walk-in 18%, remote 56%, wilderness 14%.

Facilities: Roads, camping areas, picnic areas, car parks, viewpoint, walking tracks, huts.

Animal Pests: Red/sika deer, possums, mustelids.

Plant Pests: Broom (Cytisus scoparius), lupin (Lupinus), Pinus contorta, buddleia, heather

(Calluna vulgaris). Refer Tongariro/Taupo Problem Plant Strategy.

Fences: Nil

Access: Across private land on Access 10. Poled route over private land. Tree Trunk

Gorge Road, Rangipo Road, Waipakihi Road.

**Concessions:** Refer conservation unit 60051.

Other Issues: Access. Limited due to private land surrounding the area.

Management Priority: Refer conservation unit 60051.

Management Work Done: Plant pest control, *Pinus contorta* eradication programmes 1997/1998, on three-

year rotation. Maintenance of recreation facilities (roads, signs etc.), liaison with Transpower contractors, i.e. clearing under power pylons. Short-tailed

bat survey 1997. Ongoing structure inspections and upgrade.

Last Update: April 2000

Bibliography: Refer conservation unit 60051.

2 2 Historic: **Conservation:** 3 Recreation: Value:

Site Name: Southern Access Corridor Conservation Unit No.: 60051/9 Status: Forest Park 3200.0000 File Reference: FOP 003 Area (ha): Area Office: Turangi/Taupo Map Reference: T20 409 009 Place: Kaimanawa-Moawhango Management Plan: Yes Local Authority: Taupo District Council **Ecological District:** Kaimanawa Legal Description: Various **Special Conservation** Snails (Powelliphanta marchanti) - one of three extant populations. Values: Earth Data: Cretaceous remnant greywacke-schist peneplain, stream valleys, yellow/brown loams, podzolized in places, recent soils. Flora: Mountain beech forest. Exclusive alpine communities above treeline. Extensive grassland. Fauna: Refer conservation unit 60051. Fishery Values: Refer conservation unit 60051. Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa. **Historic Resources:** Unknown Site Numbers Present: Refer conservation unit 60051. Recreation: Tramping low, hunting low. Facilities: Car park access route, signs. **Animal Pests:** Red/sika deer, horses, possums, stoats. **Plant Pests:** Broom (Cytisus scoparius), Pinus contorta, heather (Calluna vulgaris). Refer Tongariro/Taupo Problem Plant Strategy. Fences: Access: State Highway 1. **Concessions:** Refer conservation unit 60051. Other Issues: Unauthorised vehicle access through tussock by hunters. Management Priority: Refer conservation unit 60051. Control unauthorised vehicle access through tussock. Reduce possum impacts on snails (Powelliphanta marchanti). Management Work Done: Maintenance of car park, signs and poled route. Pinus contorta eradication programmes 1997/1998, on three-year rotation. Snail (Powelliphanta marchanti) surveys. Horses removed. Last Update: April 2000 Bibliography: Refer conservation unit 60051.

**Historic:** 

2

Conservation:

Value:

3

Recreation:

Site Name: Taupo Nursery Conservation Unit No.: 60052

Status: Conservation Area

Area (ha):26.2545File Reference:NUR 001Area Office:Turangi/TaupoMap Reference:U18 803 779

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

Legal Description: Part Section 1, Block XIV,

Tatua Survey District, part Tauhara Middle No. 1 Block and closed road in Block XIV

Tatua Survey District.

Special Conservation Nil

Values:

Earth Data:

Flat to sloping pumice deposits.

Flora: Native plantings. Exotic plantings.

Fauna: Most common forest birds. Duck. Quail.

Fishery Values: Nil

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Nil
Site Numbers Present: Nil

Recreation: Rural 100%.

**Facilities:** Nursery facilities. Taupo Field Centre base.

Animal Pests: Rabbits, cats, possums, rats, stock.

Plant Pests: Common plant pests. Refer Tongariro/Taupo Problem Plant Strategy.

Fences: Well fenced, cattle stop.

Access: Off Centennial Drive.

Concessions: TT/131/STR - Terra Firma, TT/175/EAS – Fletcher Woodpanels Ltd.

Other Issues: Taupo base relocated. Loss of fire-fighting staff. Cost of plant material for

vegetation restoration. Transfer of threatened plant collection. Erosion

control for thermal bores.

Management Priority: Maintain/increase the department profile in Taupo. Efficient functioning of

the field centre base. Monitor lease to Terra Firma. Settle land claim with iwi.

Control animal pests. Nursery plant data and monitoring.

Management Work Done: Lease agreement completed and Memorandum of Understanding entered into

with regards management/maintenance of TH2 bore headworks.. Establishment of Taupo Field Centre base on site to west. Construction of

conference room and other facilities.

Last Update: April 2000 Bibliography: Unknown

Value: Historic: 3 Conservation: 3 Recreation: 3

Site Name: Kawakawa Bay Conservation Unit No.: 60053

Status: Conservation Area

Area (ha): 47.8667 File Reference: RES 016

Area Office: Turangi/Taupo Map Reference: T17 562 814

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

**Legal Description:** Section 1, SO 46794, Block XI, Marotiri Survey District.

Special Conservation Stream terraces with remnant frostflat vegetation, silver tussock, soil and water

Values: conservation value.

**Earth Data:** Steep-sided gully ignimbrite. Plateau above Lake Taupo.

Flora: Fivefinger-kohuhu forest, silver tussockland, monoao scrub, flax tussockland,

kanuka, introduced grasses, kamahi forest.

Fauna: Most common forest birds, bittern, pukeko, robin. Fernbird common in river

terrace scrub associations. Seasonal use by kereru.

Fishery Values: Chinaman Creek high fishery values. Fishing at river mouth. Spawning

stream.

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Part of past Lands and Survey development block.

Site Numbers Present: Nil

**Recreation:** Pig hunting moderate. Backcountry drive-in 100%.

Facilities: Nil

Animal Pests: Possums - bovine Tb endemic, pigs (seasonal), low numbers of red deer,

stock, wasps (seasonal nuisance), mustelids, cats.

Plant Pests: Spanish heath, hawkweed (Hieracium), broom (Cytisus scoparius), blackberry,

gorse, wilding pines. Refer Tongariro/Taupo Problem Plant Strategy.

**Fences:** Well fenced, maintenance required in places. **Access:** From Whangamata Road across private land.

Concessions: Nil

Other Issues: Stock trespass, illegal camping, campfires.

Management Priority: Regeneration of seral forest to more advanced sequence. Fence to stockproof

blocks. Remove wilding pines. Control animal pests. Protect water quality

for fishery values.

Management Work Done: Possum control by Waikato Regional Council since 1970s. Ground control by

the department (ongoing). Last aerial 1080 operation September 1998. Fencing. Air survey for goats over entire reserve (ongoing). Toilet cleaning. Fencing inventory 1999. Western Lake Reserves comprehensive plant species

list 1999.

Last Update: April 2000 Bibliography: Unknown

Value: 2 Conservation: 2 Recreation: 3

Site Name: Waipahihi Stream Conservation Unit No.: 60054

Status: Conservation Area

Area (ha): 4.5020 File Reference: LES 013

Area Office: Turangi/Taupo Map Reference: U18 793 733

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

Legal Description: Lot 3, Block II Tauhara

Survey District.

**Special Conservation** Geothermal features.

Values:

Earth Data: Steep gully.

Flora: Geothermal kanuka scrub.

Fauna: Most common forest birds. Waterfowl.

Fishery Values: Introduced sailfin molly.

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

**Historic Resources:** Original site of hotel hot baths.

Site Numbers Present: Nil

**Recreation:** Swimming high, bathing high. Urban 100%.

Facilities: Recreation complex.

Animal Pests: Possums, cats, rats, mustelids.

Plant Pests: Blackberry, Himalayan honeysuckle (Leycesteria formosa), pampas. Refer

Tongariro/Taupo Problem Plant Strategy.

**Fences:** Not applicable. **Access:** State Highway 5.

**Concessions:** TT/059/STR - Taupo Hot Spings

Other Issues: Nil

Management Priority: Monitor lease. Monitor animal pests.

Management Work Done: Resource consent input. Help with tree planting schedule.

Last Update: April 2000
Bibliography: Unknown

Value:	Historic:	1	Conservation:	2	Recreation:	1	
' aracı	THIS COLLECT	1	Conscivation.	_	recreation.		

Site Name: Crown Park Conservation Unit No.: 60055

Status: Recreation Reserve

Area (ha): 18.7300 File Reference: REL 006

Area Office: Turangi/Taupo Map Reference: U18 798 742

Place:Taupo BasinManagement Plan:YesLocal Authority:Taupo District CouncilEcological District:Taupo

**Legal Description:** Section 442, Block II, Tauhara

Survey District.

**Special Conservation** Thermal gully protection.

Values:

Earth Data: Flat modified landscape. Thermal gully in pumice deposits.

Flora: Native plantings geothermal, kanuka, scrub, introduced grasses.

Fauna: Most common forest birds.

Fishery Values: Nil
Tangata Whenua Issues: Nil
Historic Resources: Nil
Site Numbers Present: Nil

**Recreation:** Domestic sports grounds. Walking low. Urban 100%.

Facilities: Sports complex, grounds, ancillary buildings.

Animal Pests: Possums, cats, rats, mustelids.

Plant Pests: Cotoneaster, blackberry, broom (Cytisus scoparius), wilding pines. Refer

Tongariro/Taupo Problem Plant Strategy.

**Fences:** Some sports fencing.

Access: From Crown Road to Taharepa Road.

**Concessions:** Leases and licences to sports clubs - Taupo District Council administered.

Other Issues: Taupo District Council appointed to control and manage with Royal Forest

and Bird Protection Society. Joint venture to revegetate gully.

Management Priority: Maintain entrance restoration. Keep walking track open.

Management Work Done: Restoration work 1982-1993 (Royal Forest and Bird Protection Society).

Wasp control (DOC).

Last Update: April 2000 Bibliography: Unknown

Value: Historic: 3 Conservation: 3 Recreation: 1

2002 - 2012

Site Name: Wharewaka Conservation Unit No.: 60056

Status: Conservation Area

0.0177 File Reference: **RES 007** Area (ha):

Area Office: U18 771 707 Turangi/Taupo Map Reference:

Place: Taupo Basin Management Plan: No Local Authority: Taupo District Council **Ecological District:** Taupo

Legal Description: Section 166, SO 43261, Block

VI, Tauhara Survey District.

**Special Conservation** Unknown

Values:

Earth Data: Pumice deposits and alluvium.

Flora: Unknown Fauna: Unknown

Fishery Values: High fishing use from rocks on shoreline.

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Unknown

Site Numbers Present: Nil

Recreation: Fishing high. Urban 100%.

Facilities: Nil

**Animal Pests:** Unknown

**Plant Pests:** Refer Tongariro/Taupo Problem Plant Strategy.

Fences: Unknown Unknown Access:

**Concessions:** 

Other Issues: Manage in conjunction with other lakeside reserves. Potential Lake Taupo

walkway.

Management Priority: Consider for disposal to Taupo District Council.

Management Work Done: Rabbit control (RPMS obligation) 1999.

Last Update: April 2000 Bibliography: Unknown

Value: **Historic:** 3 **Conservation:** 3 Recreation:

Values:

Site Name: Kawakawa Bay Conservation Unit No.: 60057

Status: Scenic Reserve

 Area (ha):
 863.4465
 File Reference:
 RES 016

 Area Office:
 Turangi/Taupo
 Map Reference:
 T18 595 797

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

Legal Description: Section 2, Block XI, Section

18, Block XII, sections 1 and 3, Block XV, sections 2, 3, and 6, Block XVI, Marotiri Survey District, Section 1, SO 59248, Section 1, SO 59305.

Special Conservation Many species and high numbers of orchids, Pimelea tomentosa, mature matai,

regenerating totara, scenic backdrop to Lake Taupo. Soil and water

conservation values.

Earth Data: Steep Whakamaru ignimbrite from lake and rhyolite dome bluffs. Steep

stream gullies, rolling tops.

Flora: Fivefinger-kohuhu forest, kowhai-kanuka forest, cliff or outcrop rockland,

mixed podocarp-broadleaved species forest in gullies.

Fauna: Most common forest birds. Seasonal use by kereru. Fernbird common in

river terrace scrubland, waterfowl along lakeshore, black-backed gulls in cliffs.

Fishery Values: High. Beach fishing.

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Timber milling.

Site Numbers Present: 6415, 6416, 6417

**Recreation:** Water-skiing moderate, walking moderate, picnicking low, hunting low, fishing

high, swimming high. Backcountry drive-in 100%.

Facilities: Sealed vault toilet, walking track. Ski lane.

Animal Pests: Possums - bovine Tb endemic, pigs (seasonal), occasional red deer, mustelids,

rabbits, hares, wasps, cats, rats, stock.

Plant Pests: Pines, crack willow, broom (Cytisus scoparius), blackberry. Refer

Tongariro/Taupo Problem Plant Strategy.

**Fences:** Fenced but regular maintenance required, north boundary fences deteriorating

badly.

Access: Lake walk from Kinloch. Lake access.

Concessions: Various guiding permits

Other Issues: Development of adjoining land by Carter Halt Harvey. Potential Lake Taupo

Walkway through area. Horses affecting track.

Management Priority: Maintain fences. Regeneration of seral vegetation back to mature forest.

Protect scenic values of lakeshore. Facilities. Control animal pests. Remove

pines. Protection of water quality. Signage required on lakefront.

Management Work Done: Possum control by Waikato Regional Council. Last aerial 1080 operation

winter 1994. Ongoing DOC possum control operation. Facilities maintenance regularly. Fencing, wilding pine removal. Aerial survey for goats. Walking track maintenance. New toilet installed 1994 (sealed vault). Fencing

inventory 1999. Summer programme.

Last Update: April 2000 Bibliography: Unknown

Value: Historic: 3 Conservation: 1 Recreation: 2

Site Name: Otaketake Stream Conservation Unit No.: 60058

Status: Scenic Reserve

 Area (ha):
 469.7063
 File Reference:
 RES 027

 Area Office:
 Turangi/Taupo
 Map Reference:
 T17 629 818

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

**Legal Description:** Sections 3, 4 and 5, Block XII,

Marotiri Survey District and part Tihoi 3B1 Block and SO46925 Marotiri Survey

District.

Special Conservation Scenic backdrop to Lake Taupo. Soil and water conservation value. Wetland,

Values: tanekaha likely, regenerating totara.

Earth Data: Steep rhyolite bluffs facing Lake Taupo. Gully systems extending water

catchments.

Flora: Fivefinger-kohuhu forest, bracken fernland, mixed podocarp-broadleaved

species forest, kanuka forest, flax-toetoe tussockland.

Fauna: Most common forest birds. Fernbird in river terrace scrubland/wetlands.

Waterfowl along lakeshore. Quail.

Fishery Values: Otaketake Stream limited value trout spawning habitat. Common indigenous

fish present.

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

**Historic Resources:** Part of old Lands and Survey development block. Rock shelter.

Site Numbers Present: 6416

**Recreation:** Hunting moderate, walking moderate, fishing moderate. Backcountry drive-in

100%.

Facilities: Walking track, signs.

Animal Pests: Possums - bovine Tb endemic, pigs (seasonal) occasional red deer, mustelids,

hare, rabbits.

Plant Pests: Pinus contorta, willows, gorse, broom (Cytisus scoparius), blackberry, heather

(Calluna vulgaris), pines. Refer Tongariro/Taupo Problem Plant Strategy.

**Fences:** Well fenced. Regular maintenance required.

Access: From Whangamata Road and lake.

Concessions: TT/148/GRA - McGill

Other Issues: Potential Lake Taupo Walkway through area.

Management Priority: Regeneration of seral scrubland to more mature forest types. Remove wilding

pines. Manage consistent with Kawakawa Bay. Removal of *Pinus contorta*. Maintain walking track. Protect water quality for fisheries. Signage required

on lakefront. Include as part of *Pinus contorta* eradication programme.

Management Work Done: Possum control by Waikato Regional Council. Last aerial 1080 operation

winter 1994. Extensive fencing operation 1988. Reserve signs placed. Goat control. Walking track maintenance. Removal of *Pinus contorta*, wilding pine, ling heather sprayed. Aerial goat survey of entire site. Investigation of pumice blow-out which has reduced trout spawning quality of stream. Fencing

inventory 1999.

Last Update: April 2000
Bibliography: Unknown

Value: Historic: 3 Conservation: 2 Recreation: 2

Site Name: Waihora Stream Conservation Unit No.: 60059

Status: Scenic Reserve

471.4070 File Reference: Area (ha): **RES 054** Area Office: Turangi/Taupo Map Reference: T18 525788

Place: Taupo Basin Management Plan: No **Local Authority:** Taupo District Council **Ecological District:** Taupo

Legal Description: Sections 1, 3 and 5, Block

XIV, Marotiri Survey District, sections 1, 2, and 3, SO 59447, Section 2, SO 59448.

**Special Conservation** Northern rata, tanekaha, scenic backdrop to Lake Taupo. Soil and water

Values: conservation values.

Earth Data: Ignimbrite bluffs significant on Waihora River boundary. Rolling country,

steep gully systems. Yellow/brown pumice soils.

Flora: Fivefinger-kohuhu forest, kanuka-manuka forest, northern rata-kamahi forest.

Most common forest birds. Fernbird common on river terrace scrubland and Fauna:

wetlands, waterfowl along lakeshore. Seasonal use by kereru.

Fishery Values: Waihora Stream spawning system. Brown trout fishing. Common indigenous

fish present.

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa. Historic Resources: Part of past Lands and Survey development block.

Site Numbers Present: 6418

Hunting low. Backcountry drive-in 100%. Recreation:

**Facilities:** Nil

Other Issues:

**Animal Pests:** Possums - bovine Tb endemic, pigs (seasonal) red deer in low numbers, rat

numbers high since 1080 possum control 1994, mustelids.

**Plant Pests:** Gorse, blackberry on margins. Refer Tongariro/Taupo Problem Plant

Strategy.

Fences: Fenced. Regular maintenance required.

Lake only (off State Highway 32 across private land). Access:

Concessions: TT/071/EAS - Landcorp Farming Ltd.

Potential Lake Taupo Walkway through area.

Management Priority: Regeneration of scrubland back to native forest. Ensure survival of rata.

Maintain scenic values of Lake Taupo shoreline. Fence maintenance. Ground

possum control works since 1994. Signage required on lakefront.

Management Work Done: Ongoing possum control by DOC. Residual trap catch 4% in 1999. Last

aerial 1080 operation winter 1994. Aerial survey for goats. Fencing.

Last Update: April 2000 Bibliography: Unknown

3 3 3 Historic: **Conservation:** Recreation: Value:

Site Name: Tutaeuaua Conservation Unit No.: 60060

Status: Scenic Reserve

 Area (ha):
 94.0208
 File Reference:
 RES 054

 Area Office:
 Turangi/Taupo
 Map Reference:
 T18 544 782

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

Legal Description: Section 6, Block XIV, Section

2, Block XV, Marotiri Survey District. Section 4, SO 59447 and Section 3, SO 59448.

**Special Conservation** 

Values:

Flax tussockland.

Earth Data: Ignimbrite. Plateau above Lake Taupo, yellow/brown pumice soils, steep

sided-gully down to pumice alluvium.

Flora: Fivefinger-kohuhu forest, silver tussockland, monoao scrub, flax swamp,

tussocklands, kanuka forest, pasture.

Fauna: Most common forest birds. Fernbird common in flax associations in river

valley.

Fishery Values: Chinaman Creek high fishery values. Spawning stream. Tutaeuaua Stream.

Common indigenous fish present.

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Unknown

Site Numbers Present: Nil

**Recreation:** Pig hunting low.

Facilities: Nil

Animal Pests: Possums - bovine Tb endemic, pigs (seasonal), red deer in low numbers,

mustelids.

Plant Pests: Wilding pines, spanish heath. Refer Tongariro/Taupo Problem Plant Strategy.

Fences: Fenced. Regular maintenance required.

Access: From State Highway 32 Whangamata Road, Puketapu Road.

Concessions: Ni

Other Issues: Potential Lake Taupo Walkway through area.

**Management Priority:** Regeneration of seral forest to more climax types. Fence to stockproof blocks.

Remove wilding pines. Control animal pests. Signage required on lakefront.

Management Work Done: Possum control by Waikato Regional Council. Last aerial 1080 operation

winter 1994. Fencing. Aerial survey for goats over entire reserve.

Last Update: April 2000

Bibliography: Unknown

Value: Historic: 2 Conservation: 2 Recreation: 3

Site Name: Kotukutuku Stream Conservation Unit No.: 60061

Status: Scenic Reserve

Area (ha): 167.9445 File Reference: RES 054

Area Office: Turangi/Taupo Map Reference: T18 502 760

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

**Legal Description:** Section 4, SO 46745, Block XIV, Marotiri Survey District.

Special Conservation Scenic backdrop to Lake Taupo. Soil and water conservation value. Tanekaha

Values: likely, wetland. Woodrose (Dactylanthus taylori).

Earth Data: Steep ignimbrite bluffs facing Lake Taupo, gully systems yellow/brown

pumice soils.

Flora: Fivefinger-kohuhu forest, bracken fernland, kamahi forest, kanuka forest, flax-

toetoe tussockland.

Fauna: Most common forest birds. Fernbird in river terrace scrubland/wetlands.

Waterfowl along lakeshore. Quail.

Fishery Values: Lake-edge fishing.

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

**Historic Resources:** Rock shelter/art. Part of past Lands and Survey development block.

Site Numbers Present: Nil

**Recreation:** Hunting moderate, walking moderate, fishing moderate.

Facilities: Nil

Animal Pests: Possums - bovine Tb endemic, pigs (seasonal), occasional red deer, rats, wasps

(seasonal pests).

Plant Pests: Willows, gorse, broom (Cytisus scoparius), blackberry, wilding pines. Refer

Tongariro/Taupo Problem Plant Strategy.

Fences: Well fenced. Regular maintenance required.

Access: State Highway 32 Hingarae Road across private land. Boat access.

Concessions: Nil

Other Issues: Potential Lake Taupo Walkway through area.

Management Priority: Regeneration of seral scrubland to more mature forest types. Remove wilding

pines. Manage consistent with Kawakawa Bay. Investigate for gazettal.

Protect water quality for fisheries. Signage required on lakefront.

Management Work Done: Ongoing possum control by Waikato Regional Council. Last aerial 1080

operation April 1994. Extensive fencing operation 1988. Reserve signs placed. Goat control work. Walking track maintenance. Removal of wilding

pines. Aerial survey for goats. Gorse spraying.

Last Update: April 2000 Bibliography: Unknown

Value: Historic: 2 Conservation: 2 Recreation: 3

Site Name: Hingarae Conservation Unit No.: 60062

Status: Scenic Reserve

 Area (ha):
 719.5111
 File Reference:
 RES 010

 Area Office:
 Turangi/Taupo
 Map Reference:
 T18 495 750

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

**Legal Description:** Sections 1, 8, 10, 11, 12 and

13, Block I, sections 1 and 2, Block II, Karangahape Survey District. Sections 8 and 14, Block XIII, Marotiri Survey District. Section 2, SO 58911.

Special Conservation Scenic backdrop to Lake Taupo. Otupoto Falls. Regenerating totara, wetland,

Values: tanekaha likely.

Earth Data: Steep ignimbrite bluffs facing Lake Taupo, gully systems, yellow/brown

pumice soils.

Flora: Fivefinger-kohuhu forest, bracken fernland, kamahi forest, kanuka forest, flax-

toetoe tussockland.

Fauna: Most common forest birds. Fernbird in river terrace scrubland/wetlands.

Waterfowl along lakeshore. Quail.

Fishery Values: High at Otupoto Falls.

Tangata Whenua Issues:Information held in the domain of Ngati Tuwharetoa.Historic Resources:Part of past Lands and Survey development block.

Site Numbers Present: 6419

**Recreation:** Hunting medium, walking moderate, fishing moderate. Backcountry drive-in

100%.

**Facilities:** Car park, track to lake edge.

Animal Pests: Possums - bovine Tb endemic, pigs (seasonal), occasional red deer.

Plant Pests: Willows, gorse, broom (Cytisus scoparius), blackberry. Refer Tongariro/Taupo

Problem Plant Strategy.

Fences: Well fenced. Regular maintenance required.

Access: From Whangamata Road and lake.

Concessions: Ni

**Other Issues:** Potential location of a field hut for management of the Lake Taupo Fishery.

Management Priority: Regeneration of seral scrubland to more mature forest types. Remove wilding

pines. Manage consistent with Kawakawa Bay. Investigate for gazettal with adjoining land. Protect water rights for fisheries. Signage required on

lakefront. Wilding pines monitoring programme.

Management Work Done: Ongoing possum control by Waikato Regional Council. Last aerial 1080

operation winter 1994. DOC possum ground control operation since 1994. Reserve signs placed. Goat control work. Removal of wilding pines. Aerial goat survey. Fencing. Western lake reserves comprehensive plant species list

1999.

Last Update: April 2000 Bibliography: Unknown

Value: Historic: 3 Conservation: 2 Recreation: 3

Site Name: Waihaha Conservation Unit No.: 60063

Status: Scenic Reserve

 Area (ha):
 595.5162
 File Reference:
 RES 052

 Area Office:
 Turangi/Taupo
 Map Reference:
 T18 452 736

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

**Legal Description:** Sections 2, 3, 4 and 16, Block

I, Karangahape Survey District. Sections 2 and 3, Block IV, Puketapu Survey District. Section 1, SO 57470, Section 1, SO 58802 and

Section 2, SO 58908.

**Special Conservation** Scenic backdrop to Lake Taupo. Rock outcrops, flax wetland.

Values:

Earth Data: Ignimbrite, plateau above Lake Taupo, yellow/brown pumice soils, steep-sided

gully.

Flora: Fivefinger-kohuhu forest, silver tussockland, monoao scrub, flax tussockland,

kanuka forest.

Fauna: Most common forest birds. Fernbird common in river terrace scrub

associations. Seasonal use by kereru. Bittern.

Fishery Values: Waihaha Stream is a significant spawning habitat for trout. Common

indigenous fish present.

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa.

**Historic Resources:** Part of past Lands and Survey development block.

Site Numbers Present: 6422

**Recreation:** Pig hunting low. Four-wheel-drive drive-in 100%.

Facilities: Car park, grassed picnic area.

**Animal Pests:** Possums - bovine Tb endemic, pigs (numbers highly variable), low numbers of

red deer, stock, wasps (a seasonal nuisance), rats and mustelids very high since

autumn 1998.

Plant Pests: Spanish heath, hawkweed (Hieracium), pines, broom (Cytisus scoparius),

blackberry, gorse, wilding pines. Refer Tongariro/Taupo Problem Plant

Strategy.

**Fences:** Well fenced. Maintenance required in places.

Access: State Highway 32.

Concessions: Nil

Other Issues: Stock trespass. Potential for Lake Taupo Walkway through area.

Management Priority: Regeneration of seral forest to more climax types. Fence to stockproof blocks.

Remove wilding pines. Control animal pests. Signage required on lakefront.

Management Work Done: Ongoing possum control by Waikato Regional Council. Last aerial 1080

operation April 1994. Fencing. Aerial survey for goats over entire reserve.

Goat control. Ground possum control operation.

Last Update: April 2000

Bibliography: Waihaha Forest Preservation Commission, New Zealand Forest Service,

Waihaha: a submission to the Minister of Forests in response to the New Zealand Forest Service management proposals for the west Taupo forests.,

Nelson Native Forests Council, Nelson 1978

Value: Historic: 3 Conservation: 2 Recreation: 3

Site Name: Waikino Conservation Unit No.: 60064

Status: Scenic Reserve

 Area (ha):
 461.1861
 File Reference:
 RES 055

 Area Office:
 Turangi/Taupo
 Map Reference:
 T18 475 675

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

**Legal Description:** Part Section 1 and sections 2,

3 and 4, Block V, Karangahape Survey District. Section 1, Block VIII, Puketapu Survey District.

Special Conservation Scenic backdrop to Lake Taupo. Soil and water conservation value. Black

Values: beech remnant which survived the Taupo eruption. Northern rata.

Earth Data: Steep ignimbrite bluffs facing Lake Taupo, yellow/brown pumice soils, gully

systems.

Flora: Black beech forest, northern rata-kamahi forest, fivefinger-kohuhu forest.

Fauna: Most common forest birds. Fernbird in river terrace scrubland/wetlands.

Waterfowl along lakeshore. Quail.

Fishery Values: Waikino waterfalls into lake. Resident trout and koaro spawning habitat.

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa.

**Historic Resources:** Escape cave, burial site. Part of past Lands and Survey development block.

Site Numbers Present: Nil

**Recreation:** Hunting low, fishing moderate. Rural natural 70%. Backcountry drive-in

30%.

Facilities: Nil

Animal Pests: Possums - bovine Tb endemic, pigs (seasonal) occasional red deer, mustelids.

Plant Pests: Willows, gorse, broom (*Cytisus scoparius*), blackberry. Refer Tongariro/Taupo

Problem Plant Strategy.

Fences: Well fenced. Regular maintenance required.

Access: From Whangamata Road and lake. Te Putu Road across private farmland.

**Concessions:** TT/200/EAS – Robinson, TT/201/EAS - Cottrell

Other Issues: Rock climbing access. Potential for Lake Taupo Walkway through area.

Unauthorised helicopter landings on flat rock adjacent to falls.

Management Priority: Regeneration of seral scrubland to more mature forest types. Remove wilding

pines. Investigate for gazettal. Signage required on lakefront.

Management Work Done: Ongoing possum control by Waikato Regional Council. Last aerial 1080

operation winter 1990. Extensive fencing operation 1988. Reserve signs placed. Goat control work. Removal of wilding pines. Ongoing monitoring for goats and wilding pines programme. Western lake reserves comprehensive

plant species list 1999.

April 2000 Last Update: Bibliography: Unknown

Value: **Historic: Conservation:** 3 Recreation: 3

Site Name: Te Hapua Bay Conservation Unit No.: 60065

Status: Scenic Reserve

Area (ha): 234.0093 File Reference: RES 042

Area Office: Turangi/Taupo Map Reference: T18 540 615

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

**Legal Description:** Sections 1 and 2, Block X,

Karangahape Survey District.

**Special Conservation** Rewarewa stands, scenic backdrop to Lake Taupo.

Values:

Earth Data: Slopes up to rhyolite dome overlain by yellow/brown pumice soils.

Flora: Fivefinger-kohuhu forest, pine plantation.

Fauna: Most common forest birds. Seasonal use by kereru, NZ falcon present,

waterfowl along lakeshore.

Fishery Values: Nil

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Unknown
Site Numbers Present: 6397, 6600

**Recreation:** Boating high, picnicking high, walking moderate, hunting low. Backcountry

drive-in 100%.

Facilities: Sealed vault toilet, tracks. Signs (lakeside and fire, track signs). Tracks from

lake frontage to Karangahape Road.

Animal Pests: Possums - bovine Tb endemic, pigs, red deer in low numbers.

Plant Pests: Broom (Cytisus scoparius). Refer Tongariro/Taupo Problem Plant Strategy.

Fences: Well fenced.

Access: From lake and walking access from Karangahape Road via paper road.

Concessions: Nil

Other Issues: Potential Lake Taupo Walkway through area.

Management Priority: Regeneration of scrubland to more mature forest types. Protect scenic values

of Lake Taupo. Fire protection. Clear-fell pines and restore with appropriate species. Identify clearly easement through Truebridge farm to reserve. Maintain tracks. Protect water quality for fisheries. Control wilding pines and

seedlings.

Management Work Done: Ongoing possum control by Waikato Regional Council. Last aerial 1080

operation winter 1990. Ground possum control operation 1994-1997. Track maintenance, signs, New toilet installed 1994. Pines logged 1996. Ongoing

wilding pine regeneration control.

Last Update: April 2000 Bibliography: Unknown

2 2 Historic: 1 **Conservation:** Recreation: Value:

Site Name: Rangitukua Conservation Unit No.: 60066

Status: Scenic Reserve

Area (ha): 210.6100 File Reference: RES 036

Area Office: Turangi/Taupo Map Reference: T18 502 546

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

Legal Description: Section 1, Block II, Pukawa

Survey District and Lot 1 (DP 25579), Block XIV, Karangahape Survey District.

Special Conservation Cliff and rock outcrop vegetation, wetland, kowhai-kanuka forest, scenic

Values: backdrop to Lake Taupo.

**Earth Data:** Steep rhyolite bluffs and dome.

Flora: Kamahi forest, kanuka forest, kowhai-kanuka forest, fivefinger-kohuhu forest,

bracken fernland, cliff or outcrop rockland, raupo reedland.

Fauna: Most common forest birds present. Seasonal use by kereru and cuckoo.

Waterfowl along lake. Spotless crake, bittern and fernbird in swamps to south.

NZ falcon present. Unconfirmed report of kiwi.

Fishery Values: Low

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa.

**Historic Resources:** Burial site, pa sites.

Site Numbers Present: 6396

**Recreation:** Rock climbing low, hunting low. Rural natural 100%.

**Facilities:** Lake frontage signs, track from boat ramp through reserve.

Animal Pests: Possums - bovine Tb endemic, pigs, wasps (seasonal nuisance).

Plant Pests: Gorse, broom (Cytisus scoparius), crack willow, lupin (Lupinus), blackberry, brier

rose (Rosa micrantha). Refer Tongariro/Taupo Problem Plant Strategy.

Fences: Well fenced.

Access: From Whareroa settlement, from Kuratau river mouth, lake access.

Concessions: Nil

Other Issues: Cliffs could provide excellent rock-climbing but conflict exists between

cultural and recreational values of this area therefore no official use. Potential Lake Taupo Walkway through area in conjunction with local Kuratau

residents.

Management Priority: Regeneration of scrubland to more mature forest. Protect scenic values of

Lake Taupo. Protect water quality for fisheries. Investigate possible walking

track.

Management Work Done: Ongoing possum control by Waikato Regional Council. Last aerial 1080

operation 1995. Ongoing site maintenance.

Last Update: April 2000 Bibliography: Unknown

Value: Historic: 1 Conservation: 2 Recreation: 2

Value:

Site Name: Motuoapa Conservation Unit No.: 60067 Status: Scenic Reserve 14.3940 File Reference: **RES 033** Area (ha): Area Office: Turangi/Taupo Map Reference: T19 586 480 Place: No Taupo Basin Management Plan: Local Authority: Taupo District Council **Ecological District:** Taupo Legal Description: Section 5, Block III, Tokaanu Survey District. **Special Conservation** Waahi tapu values. Motuoapa lava dome has regional geopreservation Values: significance. Earth Data: Modified pumice alluvial flat backed by rhyolite bluffs. Flora: Outcrop rockland, kanuka forest, fivefinger-kohuhu forest, mown grass. Fauna: Most common forest birds. Seasonal use by kereru. Fishery Values: Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa. **Historic Resources:** Burial sites. Site Numbers Present: 6606, 6607 Recreation: Walking low, picnicking low. Rural natural 100%. Facilities: Walking track. Signs (road frontage) and no climbing on cliffs signs. **Animal Pests:** Possums. **Plant Pests:** Blackberry, gorse, broom (Cytisus scoparius), cotoneaster, wilding pines, climbing spindle berry (Celastrus orbiculatus). Refer Tongariro/Taupo Problem Plant Strategy. Fences: Not applicable. Access: State Highway 1. TT/042/GRA - A. Skinner and TT/007/SSE - Crater to Lake Challenge. **Concessions:** Other Issues: Occasional unauthorised use by horses. Continue to protect waahi tapu values by discouraging climbing. Continue Management Priority: mowing site and plant pest control especially climbing spindle berry (Celastrus orbiculatus). Gazette renaming of reserve to Parikarangaranga. Management Work Done: Rock-climbing stopped on cliff faces for cultural reasons. Mowing. Plant pest control. Wasp control. Climbing spindle berry (Celastrus orbiculatus) control 1998 ongoing. 1080 aerial drop 1000 ha from delta to Motuoapa in August 1998. Ground possum control operation. Last Update: April 2000 Bibliography: Unknown

**Historic:** 

3

**Conservation:** 

3

Recreation:

2002 - 2012

3

Site Name: Waitetoko Conservation Unit No.: 60068

Status: Scenic Reserve

Area (ha):75.7520File Reference:RES 062Area Office:Turangi/TaupoMap Reference:T18 647 508

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

**Legal Description:** Sections 1 and 11, Block IV,

Tokaanu Survey District. SO

57931.

Special Conservation Scenic value of site. Waitetoko hot springs of regional geopreservation

Values: significance.

Earth Data: Flat rolling foreland, yellow/brown pumice soils.

Flora: Fivefinger-kohuhu forest, kanuka-manuka forest.

Fauna: Most common forest birds. Seasonal use by kaka, kereru.

Fishery Values: Moderate. Common indigenous fish. Important trout spawning stream.

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

**Historic Resources:** Carved pumice survey peg southern corner.

Site Numbers Present: Nil

**Recreation:** Walking moderate. Rural natural 100%.

Facilities: Nil

**Animal Pests:** Possums, pigs occasionally in winter.

Plant Pests: Old man's beard, pines, gorse, broom (Cytisus scoparius), (Cytisus scoparius),

Spanish heath, blackberry, cotoneaster, buddleia, Japanese spindle berry (Euonymus japonicus), brier rose (Rosa micrantha). Refer Tongariro/Taupo

Problem Plant Strategy.

**Fences:** Fenced on adjoining farm boundary.

Access: From State Highway 1.

**Concessions:** TT/060/STR - Lake Taupo Christian Camp.

Other Issues: Encroachment on reserve by neighbours dumping vegetation - plant pests.

Management Priority: Maintain scenic value. Control old man's beard. Advocate with neighbours

regarding dumping encroachment. Ongoing liaison with Lake Taupo Christian

Camp.

Management Work Done: Old man's beard control work. Restoration planting. Tractor mowing, reserve

signs. Small scale fishing inventory. Possum control operation by Waikato

Regional Council. Rabbit control winter 1998.

Last Update: April 2000
Bibliography: Unknown

Value: Historic: 1 Conservation: 3 Recreation: 3

Value:

Site Name: Motutere Conservation Unit No.: 60069 Status: Scenic Reserve 108.0216 Area (ha): File Reference: **RES 022** Area Office: Turangi/Taupo Map Reference: T18 680 535 Place: No Taupo Basin Management Plan: Local Authority: Taupo District Council **Ecological District:** Taupo Legal Description: Sections 6 and 7, Block II, Tokaanu Survey District. SO 47724 **Special Conservation** Scenic backdrop to Lake Taupo. Soil and water conservation values. Native Values: orchids, dwarf mistletoe (Korthalsella salicornioides). Earth Data: Rolling foreland. Steep ignimbrite bluffs, yellow/brown pumice soils. Flora: Fivefinger-kohuhu forest, bracken fernland, kanuka, kowhai forest, kamahi. Fauna: Most common forest birds, fernbird. Seasonal use by kereru. Waipehi Stream. Spawning stream. Fishing at stream mouth. Common Fishery Values: indigenous fish present. Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa. Historic Resources: Pa site - lookout above Bulli Point. Site Numbers Present: Recreation: Walking high, swimming high, hunting low. Rural natural 100%. Facilities: Walking track. **Animal Pests:** Possums, pigs, red deer, occasional sika deer, wasps, cats, mustelids. **Plant Pests:** Pampas, broom (Cytisus scoparius) (Cytisus scoparius), blackberry, wilding pines. Refer Tongariro/Taupo Problem Plant Strategy. Fences: Not applicable. Access: State Highway 1. **Concessions:** Other Issues: Realignment of State Highway 1. Poaching of trout. Access for service of power lines. Management Priority: Protect scenic values of Lake Taupo. Regeneration of scrubland to more mature forest. Develop DOC strategy to Transit New Zealand proposal realignment of State Highway 1. Ongoing possum control operation. Management Work Done: Track maintenance. Wasp control. Plant pest spraying (pampas, blackberry). Last Update: April 2000 Bibliography: Unknown

**Historic:** 

1

Conservation:

3

Recreation:

2002 - 2012

2

Values:

Site Name: Rangitaiki Conservation Unit No.: 60070

Status: Conservation Area

**Area (ha):** 5110.3461 **File Reference:** FOP 009

Area Office: Turangi/Taupo Map Reference: U18 030 515;

U19 060470

Place: Kaimanawa-Moawhango Management Plan: No

Local Authority: Taupo District Council Ecological District: Kaingaroa

Legal Description: Various including

Umupapamaro Block.

Special Conservation Large and only remaining representative of frostflat vegetation which once

covered the Kaingaroa Plateau. Te papa mire with very significant wetland

values. Black-backed gull colonies.

Earth Data: Flat to steep. Contoured around the frostflat. Scarred by large erosion gullies.

Swamp. Artificial lake. Frostflat formed by pumice alluvium from Taupo

eruption, yellow/brown pumice soils.

Flora: Monoao scrub, frostflat lichenfield, beech-mixed podocarp forest, silver

tussockland, red tussock-monoao shrubland, Baumea peat bog, Gleichenia-Empodisma peat bog, toetoe tussockland, monoao-Sphagnum peat bog, Carex-Juncus sedge rushland, Eleocharis sedgeland, kanuka forest, bracken fernland.

Fauna: Most common forest birds, kereru, kaka, kakariki, robin and rifleman in

forested areas. Kiwi reported in 1990. NZ falcon over all habitats. Fernbird in scrublands. Wide range of waterfowl on wetland. Pheasants in good

numbers on frostflat and scrubland.

Fishery Values: Moderate-high. Rangitaiki River headwaters.

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

**Historic Resources:** Originally part of Lochinvar Station and their main access route.

Site Numbers Present: 6446, 6447

**Recreation:** Gamebird hunting on lagoons. Hunting moderate. Mountain biking low-

moderate. Four-wheel-drive moderate, horse riding moderate, fishing moderate. Backcountry drive-in 31%, backcountry four-wheel-drive drive-in

37%, backcountry walk-in 9%, remote 23%.

Facilities: Access road (metal), tracks.

Animal Pests: Possums in extremely high numbers, bovine Tb nearby and reported in deer

but not confirmed. Red deer, sika deer, pigs, hares, rabbits, cats, mustelids.

Plant Pests: Hawkweed (Hieracium), heather (Calluna vulgaris), gorse, Pinus contorta. Refer

Tongariro/Taupo Problem Plant Strategy.

Fences: Fenced against Lochinvar Station. Good condition.

Access: State Highway 5.

Concessions: Nil

Other Issues: Shooting on lagoon controlled by Eastern Region Fish and Game Council.

Pinus contorta on Lochinvar Station. Encroachment with logging waste from district council plantation. Access road through Maori land. Occasional military exercises. Dairy farming on Maori land, land excahnge for dairy farming. Dumping of rubbish and major vehicles. Tb found in ferrets and deer 1999. Increasing use by motorbikes and 4WD vehicles causing adverse effects on tussock/monoao covered country resulting in ecological impacts.

Management Priority: Investigate disposal of Umupapamaro Block by way of exchange with

adjoining landowners. Remove Pinus contorta seedlings on a three-year

rotation. Education campaign to restrict use of vehicles to key tracks.

Management Work Done: Major Pinus contorta programme (2 500 hectares). Metalled access road. Ling

heather control. Signs. Monitoring logging and trespass from adjoining land.

Seedling pines removed. Partial plant species list 1999.

Last Update: April 2000 Bibliography: Unknown

Value: Historic: 3 Conservation: 1 Recreation: 2

Site Name: Hinemaiaia Conservation Unit No.: 60071

Status: Scenic Reserve

Area (ha): 130.0000 File Reference: RES 009

Area Office: Turangi/Taupo Map Reference: U18 729 564

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

**Legal Description:** Section 2, SO 47581, Block I,

Waitahanui Survey District.

Special Conservation Kowhai-kanuka forest. Soil and water protection values. Scenic backdrop to

Values: Lake Taupo. Hinemaiaia has regional geopreservation significance.

Earth Data: River valley floor and side, pumice alluvium, yellow/brown pumice soils.

Flora: Kowhai-kanuka forest, fivefinger-kohuhu forest, bracken fernland.

Fauna: Most common forest birds. Seasonal use by kereru. Long-tailed cuckoo,

shining cuckoo. Range of waterfowl along river. Whitehead colony.

**Fishery Values:** High. Fishing and spawning stream. Significant indigenous fish populations.

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Cemetery for iwi. Cultivation at southern edges of site.

**Site Numbers Present:** 8126, 8127, 8128

**Recreation:** Fishing high, walking low, mountain biking low, hunting low. Rural natural

100%.

**Facilities:** Access roads (metal), walking tracks, on-site information panels.

Animal Pests: Possums, low numbers red and sika deer, pigs, cats, mustelids, samba deer

shot 1992.

Plant Pests: Willows, cotoneaster, climbing spindle berry (Celastrus orbiculatus), Japanese

honeysuckle (Lonicera japonica), pines, heather (Calluna vulgaris), Spanish heath.

Refer Tongariro/Taupo Problem Plant Strategy.

Fences: Not applicable.

Access: State Highway 1.

**Concessions:** TT/063/EAS – Taupo District Council.

Other Issues: Resource consents, hydroelectric power generation. Poaching. Sewage

scheme within the department's reserve. Dumping of rubbish. Illegal

firewood gathering. Some cannabis cultivation.

Management Priority: Investigate appropriate land uses particularly waste management. Compliance

(fishery). Maintain fishery habitat tracks and signs. Maintain recreation

facilities. Protect water quality for fisheries. Eradicate climbing spindle berry

(Celastrus orbiculatus).

Management Work Done: Maintenance of facilities. Plant pest spraying. Monitoring Hatepe water

supply. Tanks/pipeline. Restoration of site. Restoration plantings, reserve signs. Climbing spindle berry (Celastrus orbiculatus) control programme started

1997.

Last Update: April 2000

Bibliography: Bamford, J.M., Environmental Impact Assesment, Hinemaiaia hydroelectric

development.

Hicks, B.J., Jowett, I. J., <u>Impacts of flows modified by hydroelectric generation</u> on angling and trout productivity in the Hinemaiaia River., Freshwater

Fisheries Centre, Ministry of Agriculture and Fisheries, Rotorua, 1992

Value: Historic: 2 Conservation: 2 Recreation:	]	2
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Site Name: Rangatira Point Conservation Unit No.: 60072

Status: Scenic Reserve (leasehold)

Area (ha): 113.1600 File Reference: RES 035

Area Office: Turangi/Taupo Map Reference: U18 725 705

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

Legal Description: Maori Block, Rangatira Point,

Block V, Tauhara Survey

District.

Special Conservation King fern, kowhai, scenic backdrop to Lake Taupo. Soil and water

Values: conservation value. Acacia Bay has regional geopreservation significance.

Earth Data: Undulating to steep from lake edge, pumice deposits, yellow/brown pumice

soils.

Flora: Fivefinger-kohuhu forest, bracken fernland.

Fauna: Most common forest birds, fernbird. Kiwi possible. Range of waterfowl

along lakeshore.

Fishery Values: Lakeshore fishing.

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa.

**Historic Resources:** Dwellings at Te Karaka Point. Remaining pines from domestic settlement.

Site Numbers Present: Nil

Recreation: Walking moderate, fishing moderate, swimming moderate, picnicking

moderate. Urban fringe natural 100%.

Facilities: Walking track, car park.

**Animal Pests:** Possums - bovine Tb endemic, cats, rabbits, hares, mustelids.

Plant Pests: Lakeshore willow, gorse, broom (Cytisus scoparius) (Cytisus scoparius), wilding

pines, brier rose (Rosa micrantha), blackberry. Refer Tongariro/Taupo Problem

Plant Strategy.

Fences: Not applicable.

Access: Acacia Bay Road.

Concessions: 6407

Other Issues: Vandalism, car break-ins, mountain biking impacts, access to rock carving.

Potential Lake Taupo Walkway through area. Land access to rock carvings.

Management Priority: Regeneration of scrubland back to more mature forest. Protect scenic nature

of Lake Taupo. Investigate land access to rock carvings.

Management Work Done: Possum control by Waikato Regional Council. Last aerial 1080 drop in

autumn 1994. Department of Lands and Survey, 30 000 trees planted. Monitoring road placement. Track entrance upgrade, track maintenance. Access track to Whakamoenga Point. Plant pest spraying. Fire control.

Permit issue.

Last Update: April 2000
Bibliography: Unknown

Value: Historic: 2 Conservation: 2 Recreation: 3

Site Name: Kaiapo Bay Conservation Unit No.: 60073

Status: Scenic Reserve

 Area (ha):
 201.1287
 File Reference:
 RES 014

 Area Office:
 Turangi/Taupo
 Map Reference:
 T18 688 729

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

**Legal Description:** Section 26, SO 45051, Block

IV, Tuhingamata East Survey

District.

Special Conservation Pohutukawa forest, ongaonga, scenic backdrop to Lake Taupo. Soil and water

Values: conservation values.

**Earth Data:** Steep rhyolite bluffs and rocky headland.

Flora: Fivefinger-kohuhu forest, kanuka forest, kowhai-kanuka forest, cliff or

outcrop rockland, pohutukawa (Metrosideros excelsa) forest, bracken fernland.

Fauna: Most common forest birds along lakeshore. Range of waterfowl along

lakeshore. Black-backed gull roosts/nests along bluffs. Fernbird.

Fishery Values: Moderate to low.

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

**Historic Resources:** Pa site burial caves. Waahi tapu sites.

Site Numbers Present: 6409

**Recreation:** Hunting low, fishing. Rural natural 100%.

Facilities: Ski lane.

Animal Pests: Possums - bovine Tb endemic, red deer, goats between 1988-1993 (now

removed), stock (cattle) trespass, mustelids, rabbits, rats.

Plant Pests: Gorse, broom (Cytisus scoparius) (Cytisus scoparius), pines, willow. Refer

Tongariro/Taupo Problem Plant Strategy.

Fences: Fenced along adjoining farm boundary but in poor state of repair. Not

stockproof.

Access: From lake. Mapara Road across private land.

Concessions: Nil

Other Issues: Logging of wilding pines - methods to be investigated. Potential Maori

cultural sites. Potential Lake Taupo Walkway through area, lease of Maori

land (25 year lease).

Management Priority: Regeneration of scrubland back to more mature forest types. Continued

survival of pohutukawa (*Metrosideros excelsa*). Protect scenic values of Lake Taupo. Log existing wilding pines. Fence to stop stock trespass. Banding of pohutukawa (*Metrosideros excelsa*) for possum control, possum bait stations.

Protection of water quality for fishery values.

Management Work Done: Possum control by Waikato Regional Council/DOC. Last aerial 1080

operation 1994 - DOC funded (carrot bait). Monitoring of possum browse on pohutukawa (*Metrosideros excelsa*) established 1997. Bait stations installed and maintained from 1997. DOC goat control 1988-1993. Recorded archaeological sites 1991. Gorse control on lakeshore. Complete fence assessment. Facility maintenance. DOC possum control (trap catch assessment) 1995/1996. Residual trap catch 1% in 1999. Pohutukawa monitoring 1995/1996. Monitoring and banding of pohutukawa (*Metrosideros*)

excelsa) 1997 funded by Project Crimson. Logging of wilding pines.

Last Update: April 2000
Bibliography: Unknown

Value: Historic: 1 Conservation: 2 Recreation: 3

Site Name: Opene Bush Conservation Unit No.: 60074

Status: Scenic and Historic Reserve

Area (ha): 187.3137 File Reference: REH 002

Area Office: Turangi/Taupo Map Reference: U18 893 657

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

**Legal Description:** Parts Tauhara Middle 4A2 and

4A2B2C Blocks. Sections 6, 7 and 8, Block XII, Tauhara

Survey District.

Special Conservation Remnant podocarp forest. Cultural history significant. Representative of pre-

Taupo eruption vegetation. Woodrose (Dactylanthus taylori), Thismia rodwayi.

Opepe tephra has regional geopreservation significance.

Earth Data: Gently rolling yellow/brown pumice soils.

Flora: Mixed remnant podocarp-broadleaved species forest, fivefinger-kohuhu forest,

bracken fernland, kanuka, forest.

Fauna: Most common forest birds, robin. Seasonal use by kereru, long-tailed cuckoo,

shining cuckoo. Long-tailed bat likely.

Fishery Values: Nil

Values:

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa.

**Historic Resources:** Maori settlement. Opepe township timber industry. Armed constabulary.

Battle site/grave site. Restored historic features (pits and water trough).

Site Numbers Present: 6442, 6443

**Recreation:** Walking high, education high, photography high. Rural natural 100%.

**Facilities:** Walking tracks, restored historic features.

Animal Pests: Possums, low numbers red and sika deer, pigs, stock trespass, mustelids, cats,

rabbits.

Plant Pests: Pines, Pinus contorta, broom (Cytisus scoparius), heather (Calluna vulgaris),

hawthorn. Refer Tongariro/Taupo Problem Plant Strategy.

Fences: Well fenced around boundary. Regular maintenance required.

Access: State Highway 5.

Concessions: Various guiding permits

Other Issues: Hawthorn and pines are historic resources. Spread of these is controlled.

Fossicking. Development of historic sites.

Management F	Priority:
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Improve visitor facilities. Install interpretive panels. Document historic values to facilitate management. Produce and implement conservation plans to ICOMOS standards. Control of animal pests by way of trapping and ground eradication. On site interpretation. Control of access via walking track. Develop 'Friends of Opepe Trust'.

#### Management Work Done:

Possum control by the department (Task Force Green) winters 1993-96. Facility maintenance. Summer programme. Plant pest control - *Pinus contorta* eradication scheme on a three-year rotation programme, heather (*Calluna vulgaris*). Mowing of gravesite track. Possum permits issued. Major research project on historic values begun 1993. Upgrade of walking tracks (Taskforce Green). Clear and survey historic sites. Ongoing ground possum control, increased to middle of reserve. Possum browse monitoring traverse established 1996. Woodrose (*Dactylanthus taylori*) caging and monitoring. Ongoing vegetation survey and control. 1080 in surrounding area 1999. Restoration planting winter 2000.

Last Update: January 2001 Bibliography: Unknown

** 4			_			
Value:	Historic:	1	Conservation:	1	Recreation:	2

Site Name: Taupo Court House Conservation Unit No.: 60075

Status: Historic Reserve

Area (ha): 0.3570 File Reference: REH 004

Area Office: Turangi/Taupo Map Reference: U18 769 752

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

Legal Description: Sections 5 and 8, Block

XXXVI, Town of Taupo.

**Special Conservation** High historic values.

Values:

Earth Data: Waikato River terrace.

Flora: Mown grass, amenity planting.

Fauna: Not applicable.

Fishery Values: Not applicable.

Tangata Whenua Issues: Maori canoe.

Historic Resources: Armed constabulary redoubt. Pumice magazine. Redoubt earthworks.

Site Numbers Present: Nil

**Recreation:** Historic interest.

Facilities: Old Taupo court house.

Animal Pests: Rabbits, cats, mustelids.

Plant Pests: Unknown. Refer Tongariro/Taupo Problem Plant Strategy.

Fences: Not applicable.

**Access:** Storey Place. From Great Lake Centre.

Concessions: Te Kohanga Reo Trust

Other Issues: New Zealand Historic Places Trust appointed to control and manage.

Management Priority: Taupo District Council to continue maintenance, on-site management. The

department to monitor management for Historic Places Trust.

Management Work Done: Monitoring - report to Historic Places Trust.

Last Update: April 2000 Bibliography: Unknown

Value:	Historic:	1	Conservation:	3	Recreation:	3	
				_		_	4

Site Name: Opawa Bush Conservation Unit No.: 60076

Status: Scientific Reserve

Area (ha): 26.5700 File Reference: RES 031

Area Office: Turangi/Taupo Map Reference: U19 757 466

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

Legal Description: Section 2, Block X,

Waitahanui Survey District.

Special Conservation Important remnant of pre-Taupo eruption forest. Very strong podocarp

Values: regeneration. High diversity of vegetation.

Earth Data: Rolling hill country, pumice deposits.

Flora: Beech-mixed podocarp forest, kamahi forest, kanuka forest, Dracophyllum

scrub.

Fauna: Most common forest birds, kakariki, fernbird. Seasonal use by kaka, kereru,

shining cuckoo, long-tailed cuckoo. Long-tailed bat likely.

Fishery Values: Nil

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Unknown

Site Numbers Present: Nil

**Recreation:** Rural natural 100%.

Facilities: Nil

**Animal Pests:** Possums, red and sika deer, pigs, mustelids.

**Plant Pests:** Surrounded by pine forest. Refer Tongariro/Taupo Problem Plant Strategy.

**Fences:** Old fence. May not be on boundary.

Access: Through Lake Taupo Forest. No public access.

Concessions: Nil
Other Issues: Nil

Management Priority: Re-identify boundary. Commit to annual survey.

Management Work Done: Full general survey 1993. Boundary identification. Reserve posts replaced.

Last Update: April 2000
Bibliography: Unknown

Value: Historic: 3 Conservation: 2 Recreation: 3

Site Name: Huka Falls Conservation Unit No.: 60077

Status: Scenic Reserve

Area (ha): 104.9957 File Reference: RES 011

Area Office: Turangi/Taupo Map Reference: U17 795 805

Place: Taupo Basin Management Plan: No

Local Authority: Taupo District Council Ecological District: Atiamuri

**Legal Description:** Section 2, Block XIV, Tatua

Survey District.

**Special Conservation** Very high visitor use. Huka Falls has national geopreservation significance.

Values:

Earth Data: Riverbank, bluffs, Huka formation, pumice deposits, steep erosion gullies.

Flora: Fivefinger-kohuhu forest, cabbage tree forest, kanuka-manuka scrub, shoreline

turf herbfield.

Fauna: Most common forest birds. Range of waterfowl along Waikato River.

Fishery Values: Moderate.

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa and Ngati Tahu.

**Historic Resources:** Travel route, shelter, rock overhangs.

**Site Numbers Present:** 6433, 6437, 6438

**Recreation:** Walking high, sightseeing high, mountain biking high, picnicking moderate.

Rural natural 100%.

Facilities: Walking tracks, viewpoints, on-site interpretation. Spa-Huka and Huka-

Ariatiatia walkways through area. Toilets, picnic tables, car park (part of new

reserve to be gazetted).

**Animal Pests:** Possums, rabbits, rats, mustelids.

Plant Pests: Wilding pines, wilding fruit trees, Himalayan honeysuckle (Leycesteria formosa),

blackberry, gorse, broom (Cytisus scoparius) (Cytisus scoparius), willow, climbing spindle berry (Celastrus orbiculatus). Refer Tongariro/Taupo Problem Plant

Strategy.

**Fences:** Well fenced along boundary with adjoining farm.

Access: Through lease area (Patuiwi). Huka Falls Road. Foot access via Aratiatia

Scenic Reserve Walkway.

Concessions: TT/161/WAT - Taupo Bungy and Scenic River Cruises (application),

TT/188/GUI - Chris Jolly Outdoors.

Other Issues: Lease held by the department from Patuiwi (annual rental paid). Mountain

biker/walker conflict. Pressure for tourism development. Jet boating noise and wash impacts on banks. Very high use area adjacent Huka Falls 900,000 visitors per annum. Area and facilities on true left of river awaiting gazettal as reserve (refer conservation unit 60141). High rate of vandalism. Taupo

District Council water supply easement required.

Management Priority: Maintain recreation facilities. Continue wilding pine removal. Monitor visitor

use, control climbing spindle berry (Celastrus orbiculatus). Ensure TDC water

supply easement is documented.

Management Work Done: Track/site maintenance. Wilding pine removal on logging scale. Climbing

spindle berry (*Celastrus orbiculatus*) control started 1997/1998. Possum control. Major native revegetation programmes. Track visitor surveys. Major site upgrade completed 1990 (new bridge). Major track upgrade (Taskforce Green) 1993-1995. Interpretation panels, viewing platforms (Hannah's sponsorship) 1995. Visitor surveys summer 1995/1996 assisted by Wairakei Tourist Park. Upgrade of Spa-Huka Walkway including monitoring. Climbing spindle berry (*Celastrus orbiculatus*) control. Sewage disposal pipes from new

Huka Falls toilet located in reserve.

Last Update: January 2001

Bibliography: Wairakei Tourist Park Committee, Wairakei Tourist Park visitor facility

overlooking Huka Falls., DOC, 1992

Value: 1 Conservation: 2 Recreation: 1

Site Name: Kaahu Conservation Unit No.: 60078

Status: Scenic Reserve

Area (ha): 101.9807 File Reference: RES 013

Area Office: Turangi/Taupo Map Reference: T17 564 037

Place: Taupo Basin Management Plan: No

Local Authority: Taupo District Council Ecological District: Atiamuri

**Legal Description:** Section 15, Block XI, Whakamaru Survey District.

Special Conservation Prominence in landscape. Dominant rock landsform. Landscape protection.

Values:

**Earth Data:** Steep ignimbrite hill prominent in landscape. Drops to Whakamaru lakeshore.

Flora: Broadleaved species scrub. Bracken fernland.

Fauna: Most common forest birds, fernbird likely. Limited habitat for forest birds.

Waterfowl on lake edge.

Fishery Values: Low.

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Unknown

Site Numbers Present: Nil

**Recreation:** Fishing low. Rural natural 100%.

Facilities: Nil

**Animal Pests:** Possums, stock trespass, mustelids.

Plant Pests: Pines, broom (Cytisus scoparius) (Cytisus scoparius), gorse, blackberry. Refer

Tongariro/Taupo Problem Plant Strategy.

Fences: Poorly fenced along adjoining farm boundaries. Northern end in need of

replacement.

Access: From State Highway 30 on to Pokuru Road.

Concessions: Nil

Other Issues: Rubbish dumping.

Management Priority: Removal of pines. Fencing of site. Ongoing fencing work in conjunction with

neighbouring landowners.

Management Work Done: Fencing. Annual site inspection. Possum hunters. New reserve signs.

Possum control by Waikato Regional Council. 1080 ground poisoning winter

1994. Annual aerial goat inspection.

Last Update: April 2000
Bibliography: Unknown

Value: Historic: 3 Conservation: 2 Recreation: 3

Site Name: Ngatamariki Hot Springs Conservation Unit No.: 60079

Status: Scenic Reserve

Area (ha): 49.6270 File Reference: RES 023

Area Office: Turangi/Taupo Map Reference: U17 866 924

Place: Taupo Basin Management Plan: No

Local Authority: Taupo District Council Ecological District: Atiamuri

Legal Description: Section 15, Block III and

Section 3, Block VII, Tatua

Survey District.

Special Conservation Thermal ferns, Cyclosorus interruptus. Hot springs, warm ponds, geothermal

Values: deposits.

Earth Data: Valley side of rhyolite dome and Orakanui Stream, to Waikato River,

yellow/brown pumice soils.

Flora: Fivefinger-kohuhu forest, manuka scrub, geothermal kanuka scrub, Cyclosorus

interruptus fernland, bracken fern-land, raupo reedland, plantation forests.

Fauna: Most common forest birds, fernbird.

Fishery Values: Nil

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa and Ngati Tahu.

Historic Resources: Unknown

Site Numbers Present: Nil

**Recreation:** Rural natural 100%.

Facilities: Nil

**Animal Pests:** Possums, deer, hares, rabbits, mustelids.

**Plant Pests:** Broom (*Cytisus scoparius*), wilding pines, buddleia, Himalayan honeysuckle

(Leycesteria formosa), gorse. Refer Tongariro/Taupo Problem Plant Strategy.

**Fences:** Well fenced along adjoining farm boundaries.

Access: From Tutukau Road.

Concessions: Nil

Other Issues: Waikato Regional Council monitors water quality. Erosion hazard. Easement

for farm water supply required.

Management Priority: Manage plantation forest. Protect geothermal values. Ensure farm water

supply easement is formalised.

Management Work Done: Logging of pines, monitoring area post logging for seedling pines. Replanting

of production species. Renewal of boundary fence. Possum and goat control work done 1985. New reserve signs. Pruning and thinning of pine plantation (silviculture). Environment Waikato ground possum control and bait stations

since 1994. Aerial 1080 winter 1998.

Last Update: April 2000 Bibliography: Unknown

Value: Historic: 2 Conservation: 2 Recreation: 3

Site Name:	Opoto			Conserva	tion Un	it No.:	60080	
Status:	Scenic Reserve							
Area (ha):	93.4951			File Refer	ence:		RES 032	2
Area Office:	Turangi/Taupo	•		Map Refe	rence:		V19 165	396
Place:	Kaimanawa-Mo	oawhang	О	Managem	nent Pla	n:	No	
Local Authority:	Taupo District	Council		Ecologica	al Distri	ct:	Kaimana Moawha	
Legal Description:	Part Opoto Blo	ck.						
Special Conservation Values:	Part of scenic c	orridor S	State Hig	hway 5. So	il and wa	ater conse	ervation va	lues.
Earth Data:	Steep river edge	e, Kawek	a greywa	cke.				
Flora:	Mixed podocar (Dactylanthus tay		fivefinge	r-kohuhu f	orest, br	acken fer	nland. Wo	oodrose
Fauna:	Most common long-tailed cuch general area but	koo, kaka	ariki, rob	in, NZ falc	•			
Fishery Values:	Waipunga Rive	r. High	fishery va	ılues, signif	icant ind	ligenous f	īsh values.	
Tangata Whenua Issues:	Information he	Information held in the domain of Ngati Tuwharetoa.						
Historic Resources:	Unknown							
Site Numbers Present:	Nil							
Recreation:	Hunting moderate, fishing moderate. Backcountry drive-in 100%.							
Facilities:	Nil	Nil						
Animal Pests:	Possums, red deer, sika deer, pigs, mustelids.							
Plant Pests:	Old man's beard, <i>Pinus contorta</i> , broom ( <i>Cytisus scoparius</i> ), gorse, other pines. Refer Tongariro/Taupo Problem Plant Strategy.							
Fences:	Not applicable.							
Access:	From State Highway 5.							
Concessions:	Nil							
Other Issues:	Signs often vandalised. Dumping of car bodies. Cannabis cultivation.							
Management Priority:	Remove <i>Pinus contorta</i> and monitor for seedling regrowth. Monitor and eradicate old man's beard. Annual inspection. Protect woodrose ( <i>Dactylanthus taylori</i> ). Work with NZ Police to remove cannabis, vehicles.							
Management Work Done:	New reserve signs. Old man's beard control work. Permits for possum hunters. <i>Pinus contorta</i> aerial survey. General survey late 1993. <i>Pinus contorta</i> control work. Woodrose ( <i>Dactylanthus taylori</i> ) protection (caging).							
Last Update:	April 2000							
Bibliography:	Unknown							
Value:	Historic:	3	Conse	rvation:	3	Recre	oation:	3

Site Name: Tauhara Mountain Conservation Unit No.: 60081

Status: Scenic Reserve

36.6900 File Reference: Area (ha): **RES 039** Area Office: Turangi/Taupo Map Reference: U18 839 724

Place: No Taupo Basin Management Plan: Local Authority: Taupo District Council **Ecological District:** Taupo

Legal Description: Section 20, Block III, Tauhara Survey District SO50855.

**Special Conservation** Woodrose (Dactylanthus taylori) possibly present. Tauhara lava dome has

Values: regional geopreservation significance.

Earth Data: Moderate hillcountry, yellow/brown pumice soils.

Flora: Fivefinger-kohuhu forest, bracken fernland. Fauna:

Fishery Values: Nil

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa.

**Historic Resources:** Strong early Maori settlement and cultivation. Maori occupation.

Most common forest birds.

Site Numbers Present: Nil

Recreation: Hunting low. Rural natural 100%.

Facilities: Signs.

**Animal Pests:** Possums, red and sika deer, goats (escapes), pig, mustelids. **Plant Pests:** Wilding pines. Refer Tongariro/Taupo Problem Plant Strategy.

Fences: Well fenced along boundary with adjoining farm.

Access: From State Highway 5.

**Concessions:** Nil

Other Issues: Bulk of land on mountain is Maori land limiting effective DOC management

> of scenic reserve. Recognition of the department's role on Mt Tauhara. Possible land exchange with owners to provide public access across Maori

land.

Management Priority: Remove goats from reserve and neighbouring Maori land. Possible land

exchange with owners to provide public access across Maori land.

Management Work Done: Goat hunting. Permits for hunters. Wilding pine removal. Liaison with iwi

with regard to pest control. Environment Waikato aerial 1080 operation

winter 1997.

Last Update: April 2000 Bibliography: Unknown

Value: **Historic:** 3 Conservation: 3 Recreation: 3

Site Name: Tirohanga Conservation Unit No.: 60082

Status: Scenic Reserve

Area (ha): 140.5672 File Reference: RES 043

Area Office: Turangi/Taupo Map Reference: T17 603 995

Place: Taupo Basin Management Plan: No

Local Authority: Taupo District Council Ecological District: Atiamuri

Legal Description: Sections 26 and 34, Block

XVI, Whakamaru Survey

District SO44388.

Special Conservation Best and largest remnant of original podocarp hardwood forests in Atiamuri

Values: Ecological District, despite having been logged. Woodrose (*Dactylanthus taylori*)

possibly present. Extremely large kamahi tree.

Earth Data: Moderate-steep hillcountry. South-easterly aspect. Yellow/brown pumice

soils and loams.

Flora: Fivefinger-kohuhu forest, mixed podocarp-broadleaved species forest, kamahi

forest. Previously logged.

Fauna: Most common forest birds. Seasonal use by kereru, long-tailed cuckoo,

shining cuckoo. Parrot (rosella) population. Sulphur crested cockatoo.

Fishery Values: Nil

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa and Ngati Raukawa.

**Historic Resources:** Adjacent to Maori pa. Extensive logging history.

Site Numbers Present: Nil

**Recreation:** Hunting low. Rural natural remnant 100%.

Facilities: Signs.

Animal Pests: Possums – bovine Tb endemic, red deer in low numbers, goat escapes from

adjoining farms, mustelids.

Plant Pests: Broom (Cytisus scoparius), blackberry, burdock. Refer Tongariro/Taupo

Problem Plant Strategy.

**Fences:** Bulk of site well fenced. Some maintenance required to stockproof.

Access: Adjacent Spencer Road.

Concessions: Nil

Other Issues: Goat escapes.

Management Priority: Goat removal to zero density. Complete fencing.

Management Work Done: Ongoing possum control by the department since 1990. Last 1080 operation

winter 1996. Goat monitoring annually. Fencing. Woodrose (*Dactylanthus taylori*) survey. New reserve signs. Task Force Green possum control 1994-1996 (trapping possums and bait station monitoring). Stockproof fencing.

Annual aerial goat survey.

Last Update: April 2000
Bibliography: Unknown

Value: Historic: 3 Conservation: 3 Recreation: 3

Site Name: Taupo Domain Conservation Unit No.: 60083

Status: Recreation Reserve

Area (ha): 0.5706 File Reference: REL 006

Area Office: Turangi/Taupo Map Reference: U18 800 760

Place:Taupo BasinManagement Plan:YesLocal Authority:Taupo District CouncilEcological District:Taupo

Legal Description: Part Section 308, Block III,

Tauhara Survey District, SO

45201.

Nil

Special Conservation

Values:

Earth Data: Rolling country, modified pumice alluvium.

Flora: Mown grass, exotic plantings.

Fauna: Not applicable.

Fishery Values: Nil

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Unknown

Site Numbers Present: Nil

**Recreation:** Golf. Urban fringe 100%.

Facilities: Part of two golf courses.

Animal Pests: Wasps, rabbits, mustelids.

Plant Pests: Not applicable. Refer Tongariro/Taupo Problem Plant Strategy.

**Fences:** Well fenced on all boundaries.

Access: Adjacent Centennial Drive and Broadlands Road.

Concessions: Leases and licences administered by Taupo District Council.

Other Issues: Taupo District Council appointed to control and manage.

Management Priority: Monitor Taupo District Council management.

Management Work Done: Fire control, wasp control.

Last Update: April 2000 Bibliography: Unknown

Value: Historic: 1 Conservation: 3 Recreation: 3

Site Name: Awaroa Conservation Unit No.: 60084

Status: Recreation Reserve

Area (ha): 9.6315 File Reference: RES 004

Area Office: Turangi/Taupo Map Reference: U18 773 658

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

**Legal Description:** Section 1, Block X, Tauhara Survey District SO45633.

Special Conservation Lake-edge buffer zone. Open public space. Kowhai, wetland.

Values:

Earth Data: Flat lake-edge strip, beach ridge.

Flora: Kowhai-kanuka forest (remnant), fivefinger-kohuhu forest, raupo reedland,

mown grass, native plantings.

Fauna: Some waterfowl/wetland species in wetland alongside highway. Limited value

for wildlife. Some seasonal use of kowhai by kereru and tui. Skinks.

**Fishery Values:** Significant high value lakeside fishery.

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa. Major issue with land

ownership claim by local hapu.

Historic Resources: Nil
Site Numbers Present: 6403

**Recreation:** Picnicking high, swimming high, boating moderate, fishing moderate. Rural

100%.

Facilities: Access road (metal), picnic areas/open space, toilet (disabled, sealed vault),

picnic table, bridge.

Animal Pests: Rabbits, possums, mustelids.

Plant Pests: Gorse, blackberry, willow. Refer Tongariro/Taupo Problem Plant Strategy.

Fences: Not applicable.

Access: Adjacent State Highway 1, boat access.

Concessions: Nil

Other Issues: Rubbish, vandalism.

Management Priority: Landscape enhancement planting. Major upgade being considered to enhance

natural values. Work with local iwi to develop joint approach.

Management Work Done: Plant pest control. Maintain facilities. New reserve signs (removed following

vandalism). Native amenity planting. One toilet installed 1993. Contract out

grass mowing.

Last Update: April 2000
Bibliography: Unknown

Value: Historic: 2 Conservation: 2 Recreation: 2

Values:

Site Name: Rangataua Conservation Unit No.: 60085

Status: Conservation Area

Area (ha): 6710.0000 File Reference: FOP 012

Area Office: Ruapehu Map Reference: S20, T20

Place: Tongariro-Ruapehu Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Tongariro-

Ruapehu

**Legal Description:** Section 2, SO 36623 and part

Section 1, SO 36750.

Special Conservation Karioi Rahui, proposed mainland island site. Mistletoe (Peraxilla colensoi, P.

tetrapetala, Alepis flavida). Significant orchid populations (Pterostylis foliata, Pterostylis micromega). Paramanawera bog. Largest lava flow in New Zealand. Mature forest of several types, spiritual significance to Ngati Rangi. Known roost sites of short-tailed bat. Significant remnant fauna populations.

Rangataua lava field has national geopreservation significance.

Earth Data: Rangataua andesitic lava flow. Waimarino andesitic conglomerate. Lakes,

natural and man-made.

Flora: Red beech-silver beech forest, beech-mixed podocarp forest, manuka-

Coprosma-Olearia virgata peat bog, Baumea peat bog, square sedge peat bog.

Small component of broadleaved forest.

Fauna: Most common forest birds, kaka, kereru, kiwi, kakariki, robin, crested grebe,

grey heron, paradise duck, dabchick, spotless crake, Australian coot, common waterfowl. Seasonal use by long-tailed cuckoo, shining cuckoo. Significant

long- and short-tailed bat roosts.

**Fishery Values:** Eel, koura, trout (brown and rainbow).

Tangata Whenua Issues: Determine the effects of possum control for rongoa (medicinal plants)

important to iwi. Areas with extremely high cultural significance (e.g., Lake

Rotokura). Information held in the domain of Ngati Rangi.

**Historic Resources:** Bottom lake made for recreation. Timber milling.

**Site Numbers Present:** 6112, 6134, 6132, 6133

**Recreation:** Hunting high, picnicking high, walking high. Remote 62%, Backcountry drive-

in 38%.

Facilities: Access roads. Walking tracks, car park, toilet, picnic areas, open space.

Animal Pests: Possums, red/sika deer, mustelids, rodents, pigs in low numbers.

Plant Pests: Blackberry, ragwort (Senecio jacobaea), heather (Calluna vulgaris), Pinus contorta,

barberry (Berberis), lupin (Lupinus), broom (Cytisus scoparius). Darwins barberry

(Berberis darwinii). Refer Tongariro/Taupo Problem Plant Strategy.

Fences: Nil

Access: Via public roads and Public Access Easement B on DP70971.

Concessions: Nil

Other Issues: Access road agreement with Winstone Pulp International Ltd.

Management Priority: Maintain two-wheel-drive access, metal road over 7 kilometres. Possum

control. Establish mainland island over 3000 ha in conjunction with iwi. Karioi Rahui management to fulfil mainland island protection requirements.

Management Work Done: Lake Rotokura car park, toilet, picnic areas, walking track upgraded

1993/1994. Aerial 1080 drop and ground-based possum control August 1997, now maintained by poison bait station. Plant pest control. Major research site for short-tailed bat. PhD study on the effects of 1080 on short-tailed bat populations 1994/1998, funded by Science and Research. Fishing jetty removed. Bird and vegetation monitoring ongoing including the effects of possum browse on rongoa (medicinal plants) by two permanent 6 km possum browse transects and 10 20x20 m permanent plots. Memorandum of Understanding with Ngati Rangi on the need for extensive future management of the site including achieving mainland island status. Kaka monitoring established (radio-tagged females). Full plant species list 1999. Extensive

mistletoe survey and monitoring.

Last Update: April 2000 Bibliography: Unknown

Value: Historic: 1 Conservation: 1 Recreation: 2

Site Name: Waipahihi Botanical Gardens Conservation Unit No.: 60086

Status: Scenic Reserve

Area (ha): 34.3127 File Reference: RES 057

Area Office: Turangi/Taupo Map Reference: U18 797 723

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

**Legal Description:** Section 51, Block VI, Tauhara

Survey District and Lot 89,

DP 33323.

**Special Conservation** Educational, plant collections.

Values:

Earth Data: Flat to rolling country. South-west aspect. Pumice deposits.

Flora: Fivefinger-kohuhu forest, mown grass, extensive plantings (native and exotic).

Fauna: Most common forest birds. Seasonal use by kaka, kereru, shining cuckoo,

long-tailed cuckoo.

Fishery Values: Nil
Tangata Whenua Issues: Nil

Historic Resources: Unknown

Site Numbers Present: Nil

**Recreation:** Walking high, botanical viewing high, rock climbing high. Urban 100%.

Facilities: Walk tracks, toilets, interpretation.

Animal Pests: Possums, rabbits, cats, mustelids.

Plant Pests: Not applicable.

Fences: Fenced on boundary.

Access: From Shepherds Road.

Concessions: Nil

Other Issues: Botanical Gardens Society appointed to control and manage.

Management Priority: Monitor site/Botanical Gardens Society's management.

Management Work Done: Signs, liaison with Botanical Gardens Society.

Last Update: April 2000
Bibliography: Unknown

Value: Historic: 3 Conservation: 2 Recreation: 1

Site Name:	Wharekawa	Conservation Unit No.:	60087

Status: Scenic Reserve

Area (ha):10.8576File Reference:RES 061Area Office:Turangi/TaupoMap Reference:U18 775 634

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

**Legal Description:** Part Tauhara Middle No. 10 Block, Tauhara Survey District.

**Special Conservation** 

Values:

River terrace vegetation. River protection.

Earth Data: Riverbank terrace beside Waitahanui River. Pumice alluvium deposits.

Flora: Manuka scrub, kowhai-kanuka forest (riverbanks only).

Fauna: Most common forest birds. Seasonal use by kereru of riverside kowhai.

Shining cuckoo in summer. Long-tailed bat likely. Fernbird present in scrub

associations. Waterfowl. NZ falcon.

Fishery Values: Internationally significant trout fishery. Spawning stream. High habitat values.

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Unknown

Site Numbers Present: Nil

**Recreation:** Fishing high, walking moderate. Rural natural 100%.

**Facilities:** Walking tracks, on-site information panels, car parks.

Animal Pests: Possums, occasional pig, mustelids.

Plant Pests: Spanish heath, hawkweed (Hieracium), blackberry, monkey musk (Mimulus),

gorse, broom (Cytisus scoparius), wilding pines. Refer Tongariro/Taupo

Problem Plant Strategy.

Fences: Not applicable.

Access: Adjacent State Highway 1. Blake Road.

Concessions: Nil

Other Issues: Motorbike and mountain bike use of walking tracks. Dumping of domestic

waste. Urban development. Cannabis cultivation.

Management Priority: Address dumping of rubbish – education, enforcement. Maintain fishery.

Remove wilding pines. Identify boundaries accurately. Maintain recreation

facilities. Work with NZ Police to remove cannabis.

Management Work Done: Walking track upgrade 1992/93. Signs. Boundary identification. Rubbish

clean-up. Willow control on riverbanks.

Last Update: April 2000
Bibliography: Unknown

Value: Historic: 3 Conservation: 2 Recreation: 2

Site Name: Waitahanui Conservation Unit No.: 60088

Status: Recreation Reserve

Area (ha):0.3945File Reference:RES 061Area Office:Turangi/TaupoMap Reference:U18 773 644

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

Legal Description: Lot 1, DPS 14567, Block X.

Tauhara Survey District.

**Special Conservation** Unknown

Values:

Earth Data: Flat lakeshore, beach ridge.

Flora: Unknown
Fauna: Unknown

**Fishery Values:** Significantly valued lakeside fishery.

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Unknown

Site Numbers Present: 8136, 8139, 8142

Recreation: Urban 100%.

Facilities: Nil

Animal Pests: Unknown

Plant Pests: Refer Tongariro/Taupo Problem Plant Strategy.

Fences: Unknown

Access: Adjacent State Highway 1.

Concessions: Nil
Other Issues: Nil

Management Priority: General survey required.

Management Work Done: Nil

Last Update: April 2000

Bibliography: Mitchell, C.P., Williams, G.M., A Fisheries Survey of the Waitahanui Stream

and discussion of the likely impacts of cumulative water abstractions., DOC,

Rotorua, 1995

Value: Historic: 3 Conservation: 3 Recreation: 3

Site Name: Hatepe Conservation Unit No.: 60089

Status: Recreation Reserve

Area (ha): 19.697 File Reference: RES 009
Area Office: Turangi/Taupo Map Reference: U18 712 562

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

Legal Description: Section 6 and part Section 4,

Block 1, Waitahanui Survey

District. SO47724.

Special Conservation Public open space. Lakeshore buffer zone. Horomatangi Reef, Hatepe

Values: Lappili and Hatepe Ash have international geopreservation significance.

Earth Data: Flat lake and river edge. Pumice alluvium.

Flora: Fivefinger-kohuhu forest, kowhai-kanuka forest, exotic plantings.

Fauna: Most common forest birds, fernbird. Seasonal use by kereru at lakeside, long-

tailed cuckoo, shining cuckoo. Long-tailed bat likely.

Fishery Values: Lakeshore fishing, low use.

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Unknown
Site Numbers Present: 6402

Recreation: Boating moderate, picnicking moderate, swimming moderate, water-skiing

moderate, fishing moderate. Rural natural remnant 100%.

Facilities: Access roads (metal). Picnic areas/open space. Toilet (sealed vault disabled).

Ski lane.

Animal Pests: Possums, rabbits.

Plant Pests: Broom (Cytisus scoparius), willow, climbing spindle berry (Celastrus orbiculatus),

pampas. Refer Tongariro/Taupo Problem Plant Strategy.

Fences: Not applicable.

Access: Adjacent State Highway 1. Subject to right of way in Gazette 1926, page 895

and a 20.12 m right of way along the bank of the Hinemaiaia Stream created

by Gazette 1926, page 2895.

Concessions: Nil

Other Issues: Controlled and managed by the Lake Taupo Reserves Board until inception of

Department of Conservation. Pressure for camping. Illegal short-term

camping. Illegal dumping of household rubbish, cars.

Management Priority: Maintain recreation facilities. Willow control. Eradicate climbing spindle

berry (Celastrus orbiculatus).

Management Work Done: Plant pest control. Enhancement planting. Road grading maintenance. New

reserve signs. New toilet installed 1993. Grass mowing contracted out.

Climbing spindle berry (Celastrus orbiculatus) control programme 1998.

Last Update: September 2000

Bibliography: Unknown

Value: Historic: **Conservation:** 3 Recreation: 3

Site Name: Delta Conservation Unit No.: 60090

Status: Recreation Reserve

Area (ha): 29.1064 File Reference: RES 006

Area Office: Turangi/Taupo Map Reference: T19 506 476

Place: Taupo Basin Management Plan: No

Local Authority: Taupo District Council Ecological District: Taupo Basin

**Legal Description:** 3A2 Maori Block, Hautu.

**Special Conservation** Wetland biodiversity outstanding in spite of adventive plant species. An

Values: extensive Leptocarpus rushland outside normal coastal range. Part of

outstanding example of bird's-foot delta. The delta has national

geopreservation significance.

Earth Data: Three swampy islands, mud bank, young sediments, pumice alluvium.

Flora: Raupo reedland, Leptocarpus rushland, Carex-Juncus sedge/rushland, submerged

aquatic herbfield.

Fauna: Outstanding wetland fauna including important bittern population, spotless

crake, fernbird, wide range of waterfowl. Black-billed gull colony. Caspian

tern, dabchick.

**Fishery Values:** Moderate angling use. High habitat value.

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Unknown

Site Numbers Present: Nil

**Recreation:** Fishing moderate, gamebird hunting moderate. Rural natural 100%.

Facilities: Nil

**Animal Pests:** Possums – bovine Tb endemic, goats, stock (cattle), pigs.

Plant Pests: Willow, gorse, barberry (Berberis), cotoneaster, blackberry, pines, poplars.

Refer Tongariro/Taupo Problem Plant Strategy.

Fences: Nil

Access: Boat access.

Concessions: Nil

Other Issues: Primary use for development of water power (Gaz 1943, p.1260), secondary

use is as a recreation reserve. Overcrowding at Tongariro River mouth delta with boat fishing adjacent to reserve. Future demand for eco-tour type

concessions. Fencing required to exclude stock.

Management Priority: Protect biodiversity. Control goats and stock. Eradicate pines and control

willows.

Management Work Done: Control of minor fire in 1989. Environment Waikato possum control since

1992. PhD wetland study completed 1998. 1080 aerial drop 1000 ha from

delta to Motuoapa August 1998.

Last Update: April 2000 Bibliography: Unknown

Value: 1 Conservation: 3 Recreation: 3

Site Name: Taupahi Conservation Unit No.: 60092

Status: Scenic Reserve

Area (ha): 4.8435 File Reference: RES 040

Area Office: Turangi/Taupo Map Reference: T19 538 418

Place: Taupo Basin Management Plan: No

Local Authority: Taupo District Council Ecological District: Taupo Basin

Legal Description: Section 57 Town of Turangi,

Section 36 Block I, and Section 14, Block V, Turangi

Suburban.

**Special Conservation** Kowhai provide important seasonal food source for tui and kereru. Scattered

Values: large totara and beech. Kanuka-kowhai terrace vegetation.

Earth Data: River terrace. Pumice alluvium.

Flora: Red beech-black beech forest (remnants), flax-toetoe tussockland, kowhai-

kanuka forest, kanuka-manuka forest, fivefinger-kohuhu forest, mown grass,

exotic plantings, several areas restoration planting.

**Fauna:** Seasonal use of kowhai by kereru, tui in large numbers each spring. Bellbird,

white-faced heron, grey duck. NZ falcon (breeding pair).

**Fishery Values:** High fishery value.

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Unknown
Site Numbers Present: 6604, 6605

**Recreation:** Walking high, fishing high, picnicking moderate, sightseeing high, swimming

moderate, kayaking moderate, rafting low, mountain biking high. Urban fringe

natural remnant 100%.

Facilities: Walking track, car parks, access road (metal), picnic areas/open space, on-site

information panels. Major Jones swingbridge.

Animal Pests: Possums - bovine Tb endemic, wasps a menace late summer/autumn, rabbits,

mustelids.

Plant Pests: Firethorn (Pyracantha), cotoneaster, broom (Cytisus scoparius), climbing spindle

berry (Celastrus orbiculatus), old man's beard, Japanese honeysuckle (Lonicera japonica), Pinus contorta, wandering Jew, willow, lupin (Lupinus), blackberry. Refer

Tongariro/Taupo Problem Plant Strategy.

**Fences:** On eastern properties adjoining reserve.

Access: Adjacent Te Aho Road, Poto Street, Koura Street, off Taupahi Road, State

Highway 1.

Concessions: Nil

Other Issues: Very high visitor use. Mountain biking/walking conflict. Angler destruction

of riverside vegetation. Horse use on/off tracks. Dumping of garden waste on reserve by neighbouring property owners. Plant pest control necessary.

Toxic poisons are a more effective way to combat bovine Tb.

Management Priority: Landscape restoration/revegetation. Manage recreational conflict. Protect

riparian vegetation. Maintain recreation facilities. Engage community support

for restoration planting.

Management Work Done: Possum control by Waikato Regional Council. Trapping since 1991.

Upgrading of walking track 1992. Rabbit control. Plant pest control. Signs to control use. Recreation facilities maintenance. Landscape restoration by

native revegetation.

Last Update: April 2000 Bibliography: Unknown

Value: Historic: 3 Conservation: 2 Recreation: 2

Site Name: Omori Conservation Unit No.: 60093

Status: Recreation Reserve

Area (ha):0.4457File Reference:RES 030Area Office:Turangi/TaupoMap Reference:T18 497 525

Place: Taupo Basin Management Plan: No

Local Authority: Taupo District Council Ecological District: Taupo Basin

Legal Description: Section 106 Town of Omori, Block III, Puketi Survey

District.

**Special Conservation** Kowhai, tree fuchsia, mistletoe (*Tupeia antarctica*).

Values:

Earth Data: Lakeshore, pumice alluvium.

Flora: Fivefinger-kohuhu forest, mown grass, amenity plantings.

Fauna: Most common forest birds.

Fishery Values: Nil

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Unknown
Site Numbers Present: 6395

**Recreation:** Picnicking high, walking high, boating high. Urban fringe 100%.

Facilities: Picnic area/open space, walking to Pukawa, signs.

Animal Pests: Possums, mustelids.

Plant Pests: Lupin (Lupinus), broom (Cytisus scoparius). Refer Tongariro/Taupo Problem

Plant Strategy.

Fences: Nil

Access: Adjacent Omori Road.

Concessions: TT/179/EAS - Taupo District Council

Other Issues: Reserve transferred to Taupo District Council to manage.

Management Priority: Maintain recreation facilities.

Management Work Done: Track maintenance, maintenance of recreation facilities. Ongoing ground

possum control by Environment Waikato. Structure inspection and upgrade

work.

Last Update: April 2000
Bibliography: Unknown

Value: Historic: 3 Conservation: 3 Recreation: 3

Site Name: Omori Conservation Unit No.: 60094

Status: Scenic Reserve

Area (ha): 30.2809 File Reference: RES 030

Area Office: Turangi/Taupo Map Reference: T18 493 516

Place: Taupo Basin Management Plan: No

Local Authority: Taupo District Council Ecological District: Taupo Basin

**Legal Description:** Sections 34, 38, 105 and 107,

Town of Omori and Section 2, Block III, Puketi Survey

District.

Special Conservation Large mistletoe population (Tupeia antarctica), kahikatea stand, kowhai, tree

Values: fuchsia.

Earth Data: Lakeshore, sloping foreland cliffs, pumice alluvium, Huka Formation.

Flora: Fivefinger-kohuhu forest, kahikatea forest, bracken fernland, mown grass,

kowhai-kanuka forest, kamahi, podocarps (matai, rimu, totara, miro).

Fauna: Most common forest birds. Seasonal use by kereru, long-tailed cuckoo,

shining cuckoo.

**Fishery Values:** Significant koura spawning in Omori Stream.

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Unknown

**Site Numbers Present:** 6393, 6394, 6395

**Recreation:** Walking high, swimming high, picnicking high, fishing moderate, boating high,

water-skiing high, windsurfing low. Urban fringe natural remnant 100%.

Facilities: Access roads (metal), picnic areas/open space, walking tracks, toilet (flush,

disabled). Signs (road frontage and track information), picnic tables.

Animal Pests: Possums - bovine Tb endemic, wasps a problem in late-summer/autumn.

Plant Pests: Broom (Cytisus scoparius), willow, blackberry, lupin (Lupinus), Himalayan

honeysuckle (Leycesteria formosa). Refer Tongariro/Taupo Problem Plant

Strategy.

Fences: Nil

Access: Adjacent Omori Road, boat access.

Concessions: TT/179/EAS - Taupo District Council

Other Issues: Very high visitor use. Potential Lake Taupo Walkway through area. Limited

beach space adjacent to reserve for summer activities.

Management Priority: Create new mistletoe habitat through restoration. Investigate gazettal of

60093, 60094, 60145 into one site. Maintain recreation facilities.

Management Work Done: Ongoing possum control by Waikato Regional Council. Last aerial 1080

operation winter 1994. Track and sign maintenance upgrading. New toilet installed. Walking track upgrade 1992. Planting of kohuhu to create new mistletoe habitat. Mistletoe monitoring and propagation trials (1998).

Extensive mistletoe survey and monitoring. Plant species list (1999).

Last Update: April 2000 Bibliography: Unknown

Value: Historic: 3 Conservation: 2 Recreation: 2

Site Name: Gardiners Conservation Unit No.: 60095

Status: Scenic Reserve

Area (ha):12.4326File Reference:RES 008Area Office:Turangi/TaupoMap Reference:T19 486 497

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

**Legal Description:** Lots 19 and 20, DP 4612.

**Special Conservation** Mistletoe (*Tupeia antarctica*)

Values:

Earth Data: Cliffs and sloping foreland, pumice alluvium, andesite, Huka Formation,

yellow/brown pumice soils.

Flora: Fivefinger-kohuhu forest, kanuka-manuka forest, bracken fernland. Mistletoe

(Tupeia antarctica).

Fauna: Most common forest birds. Seasonal use by kereru, long-tailed cuckoo,

shining cuckoo.

Fishery Values: Nil

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Unknown

Site Numbers Present: Nil

**Recreation:** Backcountry drive-in 100%.

Facilities: Access road.

Animal Pests: Possums - bovine Tb endemic, occasional pig, goats between 1988-1991, now

removed, stock on occasions (cattle trespass).

Plant Pests: Broom (Cytisus scoparius), Himalayan honeysuckle (Leycesteria formosa), wilding

pines. Refer Tongariro/Taupo Problem Plant Strategy.

Fences: Nil

Access: Access over private land from Pukawa Road and Parerohi Grove.

Concessions: Nil

Other Issues: Potential Lake Taupo Walkway through area. Toxic poisons are a more

effective way to combat bovine Tb.

Management Priority: Maintain stockproof fence. Resolve fencing problems with Gardiner family.

Management Work Done: Possum control by Waikato Regional Council. Last aerial 1080 operation

winter 1995. Goats eradicated 1992. Mistletoe surveys 1999. Mistletoe survey

1999. Plant species list 1999.

Last Update: April 2000
Bibliography: Unknown

Value: Historic: 3 Conservation: 3 Recreation: 3

Site Name: Morunga Conservation Unit No.: 60096

Status: Scenic Reserve

 Area (ha):
 25.4028
 File Reference:
 RES 021

 Area Office:
 Turangi/Taupo
 Map Reference:
 T19 487 489

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

**Legal Description:** Lots 17 and 18, DP 46193 and

Section 8, Block V, Puketi Survey District Lot 1

DP79678.

**Special Conservation** Scattered large totara, kowhai.

Values:

Earth Data: Cliffs and sloping foreland, Kakaramea andesite, yellow/brown pumice soils.

Flora: Fivefinger-kohuhu forest, kanuka-manuka forest, bracken fernland. Mistletoe

(Tupeia antarctica.)

Fauna: Most common forest birds. Seasonal use by kereru, long-tailed cuckoo,

shining cuckoo.

Fishery Values: Nil

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa, urupa adjoins reserve.

Historic Resources: Unknown

Site Numbers Present: Nil

**Recreation:** Nil. Backcountry drive-in 100%.

Facilities: Nil

Animal Pests: Possums, bovine Tb endemic, occasional pig, goats between 1988-1991, now

removed, stock trespass (cattle), low numbers red deer.

Plant Pests: Himalayan honeysuckle (Leycesteria formosa) (severe), willow, broom (Cytisus

scoparius). Lakeshore wilding pines. Refer Tongariro/Taupo Problem Plant

Strategy.

Fences: Nil

Access: Over private land from Parerohi Grove and via right of way to urupa.

Concessions: Ni

Other Issues: Potential Lake Taupo Walkway through area. Fencing problems on adjoining

farm boundaries - unresolved fencing dispute with Gardiner family.

Management Priority: Much of boundary re-fenced 1995. Resolve fencing problems with adjoining

owner.

Management Work Done: Ongoing possum control by Waikato Regional Council. Last aerial 1080

operation autumn 1991. Fencing maintenance. Goats eradicated 1992. Executed formal land exchange on western boundary of site to maintain

wetland conservation values, boundary fencing.

Last Update: April 2000 Bibliography: Unknown

Value: Historic: 3 Conservation: 2 Recreation: 3

Site Name: Conservation Unit No.: Erma 60097 Status: Conservation Area 11060.0128 Area (ha): File Reference: FOP 001 Area Office: Map Reference: S19, S20 Ruapehu Place: Plateau Forests Management Plan: No **Ecological District: Local Authority:** Ruapehu District Council Tongariro Legal Description: Various Fertile lower altitude area to west has very high biodiversity. Erua wetland and **Special Conservation** Values: sanctuary have high numbers of threatened plants including Pittosporum turneri, Coprosma walii, Pterostylus irwinii, Melicytus flexuosus, Olearia capillaris. National park wetland-red tussock with high numbers of threatened plants. Dactylandthus taylori. Vegetable caterpillar. Papa arches. Earth Data: Edge of ring plain, fault scarp, river gorges, incised rolling country, pumice alluvium, Wanganui series sandstone and siltstones, podzolized yellow/brown loams. Flora: Mixed podocarp-broadleaved species forest, tawa-podocarp forest, northern rata-rimu forest, red beech-mountain or black beech forest, silver or bog pinemountain toatoa forest, beech-mixed podocarp forest, Gleichenia-Empodisma peat bog, Baumea peat bog, flax-toetoe tussockland, red tussock-monoao shrubland, kaikawaka-mountain toatoa forest, manuka-Coprosma-Olearia virgata peat bog, manuka scrub, toetoe-broadleaved species scrub, kahikatea forest, kaikawaka-kamahi forest, streamside herbfield. Exotic plantations. Retired farmland. Fauna: Most common forest birds. Seasonal use by kaka, long-tailed cuckoo, shining cuckoo, robin, kereru, kakariki, rifleman and NZ falcon. Fernbird in Erua Sanctuary and associated wetland, long-tailed bat present in good numbers. Important remnant population of brown kiwi. All major rivers hold significant blue duck populations. Fishery Values: Trout Waimarino Stream, Manganuioteao. Conservation order over Manganuioteao. Common indigenous fish present. Headwaters of nationally important trout fishery. Tangata Whenua Issues: Information held in the domain of the Whanganui tribes. Historic Resources: Extensive logging history. Limited farming. River confluences crossing point for early Europeans. Site Numbers Present: 6248, 6250, 6269, 6270, 6271

Facilities: Access roads (metal). Entrance signs. Trappers' hut. Walking track.

Hunting moderate, off-road vehicle moderate, mountain biking moderate, rafting low, kayaking low, fishing high, horse riding low. Backcountry walk-in

21%, drive-in four-wheel-drive 50%, drive-in 24%, rural 5%.

Recreation:

Animal Pests: Possums - bovine Tb endemic north of Makatote, endanger survival of

threatened plants in wetland, low numbers of red deer, goats around perimeter

often in high numbers, low numbers of pigs, mustelids.

Plant Pests: Pinus contorta, gorse, broom (Cytisus scoparius), heather (Calluna vulgaris),

extensive cotoneaster infestation, broom (Cytisus scoparius), Himalayan honeysuckle (Leycesteria formosa). Refer Tongariro/Taupo Problem Plant

Strategy.

Fences: Parts fenced on adjoining farm boundaries. Many kilometres of unfenced

boundary, western margin.

Access: Adjacent State Highway 4. Middle Road. Erua Road, Cuffs Road. Fishers

Road. Mangaturuturu East Road, Manganui Valley Road.

Concessions: TT/194/GUI - Pete Outdoors, expired (extended) New Zealand Forest

Service licence to Siemonick for airstrip.

Other Issues: Goats a major problem on western margins. Illegal access, future demand by

concessionaires, illegal commercial use by 4x4 motorbikes. Firewood

gathering. New licence required for Siemoneck.

Management Priority: Regeneration of logged areas back to mature forest. Contain and destroy goats

in southern Erua. Protect rata through possum control. Control heather (*Calluna vulgaris*) through bio control (heather beetle introduced). Explore exotic forests paying for fencing. Investigate recreation use/potential. Manage in accordance with recreation development plan (1993) for vehicle use. Firewood restriction to be imposed. Control possums in Erua Sanctuary.

Management Work Done: Goat control by the department since 1989 - good results overall. Landscape

and development plan investigation undertaken in 1993. Scattered possum control in Erua Sanctuary ongoing, ongoing survey and monitoring of threatened plants in Erua Sanctuary and wetland (Pittosporum turneri, Coprosma walii, Melicytus flexuosus, Olearia capillaris). Woodrose (Dactylanthus taylori). Research into kamahi dieback in Erua Forest. Ground possum control (trapping) by the department. Manawatu/Wanganui Regional Council possum control south of Makatote and on southern boundary. Visitor Asset

Management.

Last Update: April 2000

Bibliography: Dilks. P.J., Ecology Division submission on the Erua Forest land use study.

Ecology Division of the DSIR, 1982

Eckroyd, C., Regeneration of Pittosporum turnerii communities., Forest Research

Institute, Investigation No. TT3, Rotorua, 1994

Eckroyd, C., Threatened species protection research., Forest Research

Institute, Investigation No. TT3, Rotorua, 1995

Gorman, P., A draft report on land use options for Erua State Forest., 1950

Value:	Historic:	2	Conservation:	1	Recreation:	2

Land Inventory Sheet						
Site Name:	Erua North Milled Forest	Conservation Unit No.:	60097/1			
Status:	Conservation Area					
Area (ha):	5350.0000	File Reference:	FOP 001			
Area Office:	Ruapehu	Map Reference:	S19, 255 150, and S20, 125 130			
Place:	Plateau Forests	Management Plan:	No			
Local Authority:	Ruapehu District Council	<b>Ecological District:</b>	Tongariro			
Legal Description:	Various					
Special Conservation Values:	Blue duck, woodrose ( <i>Dactylan</i> for Reteruke (soil and water co	athus taylori), regenerating forest onservation).	, major catchment			
Earth Data:		and valleys in Oligocene to Myellow/brown loams, podzoliz				
Flora:	Mixed cut-over and unlogged	podocarp. Woodrose (Dactylan	ethus taylori).			
Fauna:	Most common forest birds. Kaka, NZ falcon, kereru, blue duck, long-tailed bat, kakariki, kiwi.					
Fishery Values:	Trout, koura eels.					
Tangata Whenua Issues:	Refer conservation unit 60097.					
Historic Resources:	Old mill site, quarry (pumice a	nd metal pit).				
Site Numbers Present:	Refer conservation unit 60097					
Recreation:	Hunting low, mountain biking low. Backcountry drive-in 26%, backcountry four-wheel-drive 44%, backcountry walk-in 30%.					
Facilities:	Road, track.					
Animal Pests:	Goats, deer, dogs, cats, rats, m	ustelids.				
Plant Pests:	Pinus contorta, broom (Cytisus scoparius), gorse. Refer Tongariro/Taupo Problem Plant Strategy.					
Fences:	Fence under construction and variety of fences of varying quality.					
Access:	Fishers Road, Cuffs Road, Erua Road.					
Concessions:	Refer conservation unit 60097					
Other Issues:	Access issue on Fishers Road and Cuffs Road, power lines, kamahi die-back, hunting access.					
Management Priority:	Refer conservation unit 60097					
Management Work Done:	Fencing, goat control, hunting. Manawatu/ Wanganui Regional Council possum control since 1990. <i>Pinus contorta</i> control 1997. Last aerial 1080 operation June 1998.					
Last Update:	April 2000					
Bibliography:	Refer conservation unit 60097					

**Conservation:** 

Recreation:

Value:

Historic:

Site Name: National Park Wetland Conservation Unit No.: 60097/2

Status: Conservation Area

 Area (ha):
 115.0000
 File Reference:
 FOP 001

 Area Office:
 Ruapehu
 Map Reference:
 \$19 155 245

Place: Plateau Forests Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Tongariro

Legal Description: Various

Special Conservation Wetland of national significance containing several threatened plant species,

Values: providing wildlife habitat. Rare orchids (Prasophyllum aff. patens, Pterostylus

micromega).

Earth Data: Waimarino ring plain, wetland, peaty and podzolized yellow/brown pumice

soils.

Flora: Wetland - several threatened plant species - Thismia rodwayi etc.

Fauna: Paradise duck (waterfowl), fernbirds.

**Fishery Values:** Refer conservation unit 60097. **Tangata Whenua Issues:** Refer conservation unit 60097.

Historic Resources: Unknown

**Site Numbers Present:** Refer conservation unit 60097.

**Recreation:** Hunting low. Backcountry drive-in 22%, backcountry four-wheel-drive 78%.

Facilities: Nil

**Animal Pests:** Deer, hares, rats, mustelids.

Plant Pests: Pinus contorta, heather (Calluna vulgaris), broom (Cytisus scoparius), gorse. Refer

Tongariro/Taupo Problem Plant Strategy.

Fences: Nil

Access: Fishers Road, railway line, pylon track.

Concessions: Nil

**Other Issues:** Wetland of national significance.

Management Priority: Protect wetland - biodiversity, water quality.

Management Work Done: Removal of *Pinus contorta*, goat control, identification of endangered species

(survey and monitoring).

Last Update: April 2000

**Bibliography:** Refer conservation unit 60097.

Site Name: Tapakura Conservation Unit No.: 60097/3

Status: Ecological Area

 Area (ha):
 750.0000
 File Reference:
 FOP 001

 Area Office:
 Ruapehu
 Map Reference:
 \$19 104 205

Place: Plateau Forests Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Tongariro

Legal Description: Various

Special Conservation Tawa forest in upper reaches, gunneva and jovellana community at base of

Values: waterfall. Blue duck, woodrose (*Dactylanthus taylori*), regenerating forest.

Earth Data: Ridges and valleys in Oligocene to Miocene mudstones to limestones,

Waimarino ring plain, yellow/brown loams and pumice soils, podzolized in

places. Some peaty soils.

Flora: Mixture of cut-over and unlogged podocarp. Woodrose (Dactylanthus taylori).

Fauna: Most common forest birds, kaka, NZ falcon, kereru, blue duck, long-tailed bat,

kakariki.

**Fishery Values:** Refer conservation unit 60097. Trout, koura, eels.

**Tangata Whenua Issues:** Refer conservation unit 60097.

Historic Resources: Unknown

**Site Numbers Present:** Refer conservation unit 60097.

**Recreation:** Hunting low, mountain biking low. Backcountry four-wheel-drive 33%,

backcountry walk-in 67%.

Facilities: Nil

Animal Pests: Goats, deer, mustelids, cats, rats.

Plant Pests: Pinus contorta, broom (Cytisus scoparius), gorse. Refer Tongariro/Taupo Problem

Plant Strategy.

**Fences:** Fence in construction and variety of fences of varying quality/condition.

Access: Fishers Track.

Concessions: Nil

Other Issues: Access, kamahi die-back.

Management Priority: Maintain status quo.

**Management Work Done:** Fencing, goat control. *Pinus contorta* control 1997.

Last Update: April 2000

**Bibliography:** Refer conservation unit 60097.

Value:

Site Name: Erua Conservation Unit No.: 60097/4 Status: Ecological Area Area (ha): 175.0000 File Reference: FOP 001 **Area Office:** Ruapehu Map Reference: S20 109 109 Place: Plateau Forests Management Plan: No **Local Authority:** Ruapehu District Council **Ecological District:** Tongariro Legal Description: Various Rare plants - Pittosporum turneri, woodrose (Dactylanthus taylori), Coprosma walii, **Special Conservation** Values: Pterostylus irwinii, Melicytus flexuosus, Olearia capillaris. Other wetland species. Blue duck. Earth Data: Waimarino ring plain, fault scarp, flood plain, pumice alluvium, yellow/brown pumice soils podzolized in places, peaty soils. Flora: Wetland, logged and unlogged podocarp forest. Threatened wetland plant species. Fauna: Most common forest birds. Waterfowl, NZ falcon, blue duck. Fishery Values: Waimarino Stream - large eels observed. Common indigenous freshwater species. Moderate value trout fishery. Refer conservation unit 60097. Tangata Whenua Issues: Refer conservation unit 60097. Historic Resources: Unknown Site Numbers Present: Refer conservation unit 60097. Recreation: Hunting and mountain biking low. Backcountry drive-in 100%. **Facilities:** Roads. **Animal Pests:** Deer, possums, mustelids, rats. **Plant Pests:** Pinus contorta, gorse. Refer Tongariro/Taupo Problem Plant Strategy. Fences: Nil Access: Erua Road. **Concessions:** Nil Other Issues: Nil Refer conservation unit 60097. Erua Sanctuary threatened plants, possum **Management Priority:** control. Management Work Done: Possum control, Pinus contorta control, survey and monitoring of threatened plants. DOC ground possum control (bait stations) 1995, ongoing. Last Update: April 2000 Refer conservation unit 60097. Bibliography:

**Historic:** 

Conservation:

3

Recreation:

Site Name: Erua Exotic Forest Conservation Unit No.: 60097/5

Status: Conservation Area

 Area (ha):
 500.0000
 File Reference:
 FOP 001

 Area Office:
 Ruapehu
 Map Reference:
 \$20 104 105

Place: Plateau Forests Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Tongariro

Legal Description: Various

**Special Conservation** Woodrose (*Dactylanthus taylon*), bats

Values:

Earth Data: Waimarino ring plain, fault scarp, stream gullies, pumice, alluvium,

yellow/brown pumice soils, podzolized in places, peaty soils.

Flora: Exotic forest, logged and unlogged podocarp forest.

Fauna: Most common forest birds, NZ falcon, short-tailed bat.

Fishery Values: Makatote Stream and Waimarino - trout, eels, koura. Refer conservation unit

60097.

**Tangata Whenua Issues:** Refer conservation unit 60097.

Historic Resources: Unknown

**Site Numbers Present:** Refer conservation unit 60097.

**Recreation:** Mountain biking low, trail biking, four-wheel-driving low, fishing low. Rural

100%.

Facilities: Roads (access).

**Animal Pests:** Possums, deer, mustelids, rats.

Plant Pests: Pinus contorta. Refer Tongariro/Taupo Problem Plant Strategy.

Fences: Nil

Access: Erua Road and State Highway 4.

**Concessions:** Firewood permits required for *ad hoc* public takes of waste exotic timber.

Other Issues: Firewood restrictions. *Pinus contorta* control.

Management Priority: Limiting possum re-invasion of Erua Sanctuary. Allow regeneration of native

forest. Protect water quality.

Management Work Done: Possum control (ongoing), Pinus contorta removal, survey and monitoring of

woodrose (Dactylanthus taylori). DOC possum control (ongoing since 1993).

Last Update: April 2000

**Bibliography:** Refer conservation unit 60097.

Site Name: Mangamingi Conservation Unit No.: 60097/6
Status: Ecological Area

**Area (ha):** 1050.00 **File Reference:** FOP 001

Map Reference:

S20 060 110

Place: Plateau Forests Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Tongariro

Legal Description: Various

**Special Conservation** Rata-podocarp and rata-tawa forest. Kiwi.

Ruapehu

Values:

Area Office:

Earth Data: Ridges and valleys in Miocene sandstone, yellow/brown loams podzolized in

places.

Flora: Unlogged remnant of podocarp, tawa, rata, kahikatea on river terraces.

Fauna: Most common forest birds, kaka, kiwi, long-tailed bats.

Fishery Values: Refer conservation unit 60097.

Tangata Whenua Issues: Refer conservation unit 60097.

Historic Resources: Unknown

**Site Numbers Present:** Refer conservation unit 60097.

**Recreation:** Hunting low. Backcountry walk-in 62%, backcountry four-wheel-drive 38%.

Facilities: Nil

Animal Pests: Possums, goats, rats, mustelids, red deer, loose stock.

Plant Pests: Broom (Cytisus scoparius), heather (Calluna vulgaris). Refer Tongariro/Taupo

Problem Plant Strategy.

Fences: Southern and part of western boundaries fenced, south-west, south-east

completely fenced, north-west boundary partly fenced.

Access: Manganui Valley Road.

Concessions: Nil
Other Issues: Nil

Management Priority: Permanent forest health monitoring plots established. Protect water quality.

Restore rata. Refer conservation unit 60097.

Management Work Done: Possum browse plots established. Possum browse monitoring traverse

established 1997. Indexing of possum abundance. DOC aerial 1080 drop September 1995. Goat control since 1993. Fencing to exclude stock. Ground

1080 operation in January 2000.

Last Update: April 2000

**Bibliography:** Refer conservation unit 60097.

Value: Historic: 3 Conser	rvation: 1 Recreation: 3
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Land Inventory Sheet						
Site Name:	Erua South Milled Forest	Conservation Unit No.:	60097/7			
Status:	Conservation Area					
Area (ha):	3005.0000	File Reference:	FOP 001			
Area Office:	Ruapehu	Map Reference:	S20 100 080			
Place:	Plateau Forests	Management Plan:	No			
Local Authority:	Ruapehu District Council	<b>Ecological District:</b>	Tongariro			
Legal Description:	Various					
Special Conservation Values:	Blue duck on Manganuioteao	and Makatote rivers.				
Earth Data:	Waimarino ring plain, ridges and valleys in Pliocene mudstone.					
Flora:	Heavily milled cut-over podoc	carp-broadleaved forest.				
Fauna:	Most common forest birds, ki	wi, kaka, kakariki.				
Fishery Values:	Refer conservation unit 60097.					
Tangata Whenua Issues:	Refer conservation unit 60097.					
Historic Resources:	Old tramline remnants.					
Site Numbers Present:	Refer conservation unit 60097	7.				
Recreation:	Hunting low, trail biking, mountain biking, four-wheel-driving low, rafting/canoeing/fishing low, camping low. Rural 1%, backcountry drive-in 23%, backcountry four-wheel-drive 56%, backcountry walk-in 20%.					
Facilities:	4WD access road.					
Animal Pests:	Goats, red deer, possums, mu	stelids, loose stock, occasional	pig.			
Plant Pests:	Heather (Calluna vulgaris), broom (Cytisus scoparius), gorse, Himalayan honeysuckle (Leycesteria formosa), Pinus contorta. Refer Tongariro/Taupo Problem Plant Strategy.					
Fences:	South-west boundary partly fenced. Eastern boundary nearly completely fenced. Unfenced area adjoining state highway. 400m new fences.					
Access:	Mangaturuturu East Road, Middle Road.					
Concessions:	Refer conservation unit 60097.					
Other Issues:	Heather beetle released Decer	mber 1997 off Odeys Camp.				
Management Priority:	Maintain fences, control plan heather (Calluna vulgaris). Refer	nt pests, protection of water r conservation unit 60149.	quality. Control			
Management Work Done:		ember 1997. Aerial 1080 pos gional Council. Ongoing goa				
Last Update:	April 2000					
Bibliography:	Refer conservation unit 60097	7.				

Historic:

2

2

**Conservation:** 

2

Recreation:

Value:

Last Update:

Bibliography:

Site Name: Hura Conservation Unit No.: 60098 Status: Scenic Reserve 4.0220 File Reference: **RES 012** Area (ha): Area Office: Turangi/Taupo Map Reference: T19 483 480 Place: Taupo Basin Management Plan: No Local Authority: Taupo District Council **Ecological District:** Taupo Legal Description: Lot 5, DP 43692, Block V, Puketi Survey District. **Special Conservation** Unknown Values: Earth Data: Steep gully, sloping foreland, Kakaramea andesite. Flora: Mixed broadleaved species forest. Fauna: Most common forest birds. Fishery Values: Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa. Historic Resources: Unknown Site Numbers Present: Nil Recreation: Nil Facilities: Nil **Animal Pests:** Possums - bovine Tb endemic, goats in low numbers 1988-91, now removed, low numbers of pigs. **Plant Pests:** Broom (Cytisus scoparius), Himalayan honeysuckle (Leycesteria formosa). Refer Tongariro/Taupo Problem Plant Strategy. Fences: Nil Via lake although steep over private land. Access: **Concessions:** Nil Other Issues: Nil Management Priority: Retain status quo. Management Work Done: Goat control since 1989. Waikato Regional Council aerial 1080 drop August 1995.

Value:	Historic:	3	Conservation:	3	Recreation:	3
value.	I II GUIIC.	9	Conscivation.	9	itccication.	9

April 2000

Unknown

Site Name: Waihi Road Conservation Unit No.: 60099

Status: Recreation Reserve

 Area (ha):
 2.0400
 File Reference:
 RES 053

 Area Office:
 Turangi/Taupo
 Map Reference:
 T19 484 463

Place: Taupo Basin Management Plan: No

Local Authority: Taupo District Council Ecological District: Tongariro

Legal Description: Lots 1 and 2, DP 51475,

Block IX Puketi Survey

District.

**Special Conservation** Important wetland habitat. Mistletoe (*Korthalsella salicornioides*) present. **Values:** 

Earth Data: Lakeshore wetland, peaty and ashy soils, pumice alluvium.

Flora: Raupo reedland. Native planting for restoration. Mistletoe (Korthalsella

salicornioides) present.

Fauna: Range of waterfowl utilise wetland including swan, duck, dabchick, heron,

shag, bittern.

**Fishery Values:** High trout fishing values at Slip Creek mouth.

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Unknown

Site Numbers Present: Nil

Recreation: Fishing moderate, swimming moderate, picnicking moderate, boating

moderate, kayaking moderate, windsurfing low, gamebird hunting low.

Backcountry drive-in 100%.

Facilities: Picnic area/open space, car park, sealed vault toilet, road frontage sign.

Animal Pests: Possums, mustelids.

Plant Pests: Willow, herbaceous plant pests, gorse, broom (Cytisus scoparius), blackberry.

Refer Tongariro/Taupo Problem Plant Strategy.

Fences: Nil

Access: Adjacent Waihi Road, boat access.

Concessions: Nil
Other Issues: Nil

Management Priority: Maintain recreation facilities. Restore and maintain wetland biodiversity. Re-

gazette 60099, 60100, 60108 for integrated management. Willow control and

monitoring.

Management Work Done: Major restoration programme 1989. Annual removal of crack willows.

Extensive planting. Local school involvement. Development of picnic area car park 1991. New toilet facility 1994. Mistletoe (Illeostylus micranthus and

Tupeia antarctica) propagation trials (1998).

Last Update: April 2000

Bibliography: Marewa-Severne, C., Hipaua geothermal area, Tokaanu-Waihi geothermal

system, Taupo Volcanic Zone. Thesis for an MSc in Geology, Department of

Geology, University of Auckland, 1995

Value: 1 Conservation: 2 Recreation: 2

Site Name: Waihi Conservation Unit No.: 60100

Status: Scenic Reserve

Area (ha): 11.9908 File Reference: RES 053

Area Office: Turangi/Taupo Map Reference: T19 483 461

Place: Taupo Basin Management Plan: No

Local Authority: Taupo District Council Ecological District: Tongariro

Legal Description: Lot 3, DP 51475, Blocks V,

IX Puketi Survey District.

**Special Conservation** Important wetland habitat. Good example of raupo reedland. Kahikatea.

Values:

Earth Data: Wetland, lake edge, peaty and ashy soils, pumice alluvium.

Flora: Raupo reedland, manuka scrub, kahikatea forest (regenerating).

Fauna: Bittern, spotless crake, fernbird, range of waterfowl.

Fishery Values: Protect water quality.

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Unknown
Site Numbers Present: 6390

**Recreation:** Nil. Backcountry drive-in 100%.

Facilities: Nil

Animal Pests: Mustelids.

Plant Pests: Pampas and willows. Refer Tongariro/Taupo Problem Plant Strategy.

Fences: Nil

Access: Adjacent Waihi Road, State Highway 41.

Concessions: Nil
Other Issues: Nil

Management Priority: Protection of important wetland habitat.

Management Work Done: Removal of willows - ongoing.

Last Update: April 2000
Bibliography: Unknown

Site Name: Oruatua Conservation Unit No.: 60101 Status: Recreation Reserve File Reference: **RES 041** Area (ha): 33.1615 Area Office: Turangi/Taupo Map Reference: T18 616 502 Place: Management Plan: No Taupo Basin Local Authority: Taupo District Council **Ecological District:** Taupo Legal Description: Sections 14 and 15, Block IV, Tokaanu Survey District and Section 37, Town of Oruatua. **Special Conservation** Kowhai-kanuka associations on riverbanks. Values: Earth Data: Terrace, pumice and greywacke alluvium. Kowhai-kanuka forest, manuka scrub, native plantings. Flora: Fauna: Most common forest birds, fernbird. Internationally significant trout fishery (brown and rainbow). Fishery Values: indigenous fish present. Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa. Historic Resources: Unknown 8117, 8118 Site Numbers Present: Recreation: Fishing high, walking low. Rural natural remnant 100%. **Facilities:** Walking tracks, on-site information panel for fishery, track information signs. **Animal Pests:** Possums - bovine Tb endemic, mustelids. **Plant Pests:** Japanese honeysuckle (Lonicera japonica), old man's beard, willow, blackberry, broom (Cytisus scoparius). Refer Tongariro/Taupo Problem Plant Strategy. Fences: Fenced on adjoining farm boundary. Access: Adjacent to State Highway 1, southern part of area off Tuki Road.

Concessions: Nil
Other Issues: Nil

Management Priority: Control climbers to facilitate survival of kowhai-kanuka associations. Control

Japanese honeysuckle (Lonicera japonica). Maintain recreation facilities.

Management Work Done: Ongoing possum control by Waikato Regional Council. Trapping since 1991.

Track maintenance.

Last Update: April 2000
Bibliography: Unknown

Site Name: Manowharangi Bay Conservation Unit No.: 60102

Status: Recreation Reserve

Area (ha): 1.8294 File Reference: RES 041

Area Office: Turangi/Taupo Map Reference: T18 617 510

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

**Legal Description:** Sections 35 and 36, Town of

Oruatua, Block IV Tokaanu

Survey District.

Special Conservation Nil

Values:

Earth Data: Lakeshore, pumice alluvium.

Flora: Nil

Fauna: Range of waterfowl on beachfront includes swan, duck, heron, shag.

Fishery Values: Internationally significant trout fishery (brown and rainbow). Common

indigenous fish present.

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Unknown

Site Numbers Present: Nil

**Recreation:** Fishing high. Rural natural remnant 100%.

Facilities: Fishery information panel. Toilet installed by Taupo District Council (sealed

vault), track through reserve to lake on true-right Tauranga-Taupo River.

Animal Pests: Possums - bovine Tb endemic, wasps a nuisance in high summer, mustelids.

Plant Pests: Blackberry, willow, Japanese honeysuckle (Lonicera japonica), old man's beard.

Refer Tongariro/Taupo Problem Plant Strategy.

Fences: Nil

Access: Lakeshore right of way foot access and access via State Highway 1 north of

Tauranga-Taupo bridge. Boat access.

Concessions: Nil

Other Issues: Pressure from local community and Taupo District Council for the

department to seal car park at roadend.

Management Priority: Maintain and restore site. Monitor old man's beard. Amenity planting around

car park. Investigate vesting in Taupo District Council.

Management Work Done: Ongoing possum control by Waikato Regional Council. Trapping since winter

1991. Toilet installed by Taupo District Council (sealed vault), track through reserve to lake on true right of Tauranga-Taupo River. Revegetation and plant

pest control. Liason with adjacent property owners.

Last Update: April 2000 Bibliography: Unknown

Site Name: Conservation Unit No.: 60103 Mission Bay

Status: Recreation Reserve

5.3362 File Reference: **RES 062** Area (ha): Area Office: Turangi/Taupo Map Reference: T18 658 512

Place: Taupo Basin Management Plan: No Local Authority: Taupo District Council **Ecological District:** Taupo

Legal Description: Sections 12 and 13, Block IV, Tokaanu Survey District.

**Special Conservation** Scenic value.

Values:

Earth Data: Flat rolling lakeshore, water-sorted pumice.

Flora: Fivefinger-kohuhu forest, kanuka-manuka forest.

Fauna: Most common forest birds. Seasonal use by kereru and kaka.

Fishery Values: Significant lakeshore fishery.

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa.

**Historic Resources:** Unknown

Site Numbers Present: Nil

Recreation: Walking low. Swimming, water-skiing, fishing. Rural natural remnant 100%.

Facilities: Unofficial track and barrier within reserve used by Christian Camp visitors.

**Animal Pests:** Possums - bovine Tb endemic, rats, cats, mustelids.

**Plant Pests:** Pines, gorse, broom (Cytisus scoparius), blackberry, cotoneaster, buddleia,

> Japanese honeysuckle (Lonicera japonica), climbing spindle berry (Celastrus orbiculatus), brier rose (Rosa micrantha), willow. Refer Tongariro/Taupo Problem

Plant Strategy.

Fences: Unknown

Access: Adjacent State Highway 1.

**Concessions:** Nil Other Issues: Nil

Management Priority: Maintain scenic values, plant pests and pests.

Mowing, plant pest control. Climbing spindle berry (Celastrus orbiculatus) control Management Work Done:

programme 1998.

Last Update: April 2000 Bibliography: Unknown

Recreation: 2 Conservation: 3 3 Value: **Historic:** 

Site Name: Kopokonui Stream Conservation Unit No.: 60104

Status: Scenic Reserve

 Area (ha):
 27.5837
 File Reference:
 RES 008

 Area Office:
 Turangi/Taupo
 Map Reference:
 T18 485 503

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

**Legal Description:** Part Lot 1, DP 30924, Lots 1,

2, 3 and 4, DP 46501, Lot 1, DP 52793 and Lots 8 and 9, DP 5777, Puketi Survey

District.

**Special Conservation** Mistletoe species (*Tupeia antarctica* and *Illeostylus micranthus*), large podocarps.

Values:

Earth Data: Moderate to steep foreland, cliffs, Huka Formation, yellow/brown soils.

Flora: Fivefinger-kohuhu forest, bracken fernland, mixed podocarp-broadleaved

species forest.

Fauna: Most common forest birds. Seasonal use by kereru, shining cuckoo, long-

tailed cuckoo.

Fishery Values: Nil

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Unknown
Site Numbers Present: 6392

**Recreation:** Walking high. Urban fringe natural remnant 100%.

Facilities: Walking tracks, track information signs, water tanks in reserve, viewing

platform and seats on track.

**Animal Pests:** Possums – bovine Tb endemic, mustelids, rabbits.

Plant Pests: Blackberry, Himalayan honeysuckle (Leycesteria formosa) which is beginning to

spread extensively, broom (Cytisus scoparius). Refer Tongariro/Taupo Problem

Plant Strategy.

**Fences:** Fenced on adjoining farm boundary.

Access: Hauraki Terrace or end of Pukawa Road.

Concessions: Nil

Other Issues: Large degree of community involvement in reserve management, track

construction. Potential to include as part of Lake Taupo Walkway, water tanks, Taupo District Council access to area (no easement at present) and

water intake (remove redundant water tank).

Management Priority: Maintain, restore conservation values through planting programme. Maintain

recreation facilities. Maintain track/signs and resolve outstanding issues with

Taupo District Council. Protect water quality.

Management Work Done: Possum control by Waikato Regional Council since 1991 (trapping).

Construction of Pukawa bush walk. Track maintenance, Pukawa bush walk completed. Signs, seats, viewing platform installed. Mistletoe survey December 1999. Mistletoe survey 1999 (ongoing). Plant species list 1999.

Last Update: April 2000

Bibliography: Weir. B. C., Pukawa Bay: Management plan for open space and recreation

reserve concept., Department of Horticultural and Plant Health Massey

University, Palmerston North, 1978

Bibliography:

Site Name: Okaia Stream Conservation Unit No.: 60105 Status: Scenic Reserve 40.5790 File Reference: Area (ha): **RES 027** Area Office: Turangi/Taupo Map Reference: T17 641 801 Place: No Taupo Basin Management Plan: Local Authority: Taupo District Council **Ecological District:** Taupo Legal Description: Section 4, Block XVI, Marotiri Survey District and lots 7, 8, 9 and 10, DPS 38472. **Special Conservation** Soil and water values. Values: Earth Data: Stream edge, gently rolling, pumice alluvium. Fivefinger-kohuhu forest, flax tussockland, Carex-Juncus sedge rushland, exotic Flora: plantings extensive. Fauna: Most common forest birds, fernbird. Fishery Values: High fishery values. Common indigenous fish present. Information held in the domain of Ngati Tuwharetoa. Tangata Whenua Issues: Historic Resources: Unknown Site Numbers Present: Nil Recreation: Walking moderate, fishing low. Backcountry drive-in 100%. **Facilities:** Walking track, duck pond and maimai. **Animal Pests:** Possums - bovine Tb endemic, pigs. **Plant Pests:** Willow, blackberry, wilding pines. Refer Tongariro/Taupo Problem Plant Strategy. Fences: Fenced, stockproof. Access: Boat access, foot access along lakeshore. Whangamata Road. **Concessions:** TT/045/EAS - D F Comber. Other Issues: Easement requirements for subdivisions. Illegal camping and fire. Management Priority: Remove willows. Maintain walking track. Management Work Done: Thinning, pruning in exotic forest. Walking track maintenance. Pine removal, fencing. Possum control by Waikato Regional Council. Last 1080 operation autumn 1991. Ongoing ground possum control operation since 1996. Eradicate escaped farm goats. April 2000 Last Update:

Value:	Historic:	3	Conservation:	3	Recreation:	3
					•	

Unknown

Site Name: Otamarautara Stream Conservation Unit No.: 60	<b>o.:</b> 60106
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Status: Scenic Reserve

 Area (ha):
 563.5700
 File Reference:
 RES 047

 Area Office:
 Turangi/Taupo
 Map Reference:
 T19 346 422

Place: Plateau Forests Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Tongariro

**Legal Description:** Section 1, Block VI, Waimanu Survey District SO33758.

**Special Conservation** Outstanding biodiversity. Extremely healthy forest with dense understorey in

Values: places. Woodrose (Dactylanthus taylori).

Earth Data: Site centre around Maungakatote Hill. Steep. Andesite cone (steep)

yellow/brown pumice soils and podzols.

Flora: Mixed podocarp-broadleaved species forest, mixed podocarp forest, kahikatea

forest, kamahi forest, woodrose (Dactylanthus taylori).

Fauna: Most common forest birds, kaka, kereru, kakariki, robin. Kiwi reported but

not confirmed April 1993. Seasonal use by long-tailed cuckoo, shining

cuckoo, long-tailed bat, possibly short-tailed bat.

Fishery Values: Nil

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Unknown

Site Numbers Present: Nil

**Recreation:** Hunting low, tramping low. Backcountry drive-in 39.7%, backcountry four-

wheel-drive drive-in 32%, backcountry walk-in 28.3%.

Facilities: Nil

Animal Pests: Possums - bovine Tb endemic, low numbers red deer, low numbers of pigs.

Plant Pests: Buddleia, cotoneaster, Pinus contorta, heather (Calluna vulgaris). Refer

Tongariro/Taupo Problem Plant Strategy.

Fences: Nil

Access: Over private land from Access Road No. 4. Lake Rotoaira Forest.

Concessions: Nil

Other Issues: Illegal timber salvage activity.

Management Priority: Maintain biodiversity. Monitor *Pinus contorta* for re-infestation.

Management Work Done: Ongoing possum control by Waikato Regional Council. Aerial 1080

operation, carrot and pollard bait 1993. Additional carrot operation 1997.

Signs indicating status at reserve entry points.

Last Update: April 2000
Bibliography: Unknown

Site Name: Pihanga Conservation Unit No.: 60107

Status: Scenic Reserve

 Area (ha):
 37.8684
 File Reference:
 RES 048

 Area Office:
 Turangi/Taupo
 Map Reference:
 T19 430 420

Place: Tongariro-Ruapehu Management Plan: No

Local Authority: Taupo District Council Ecological District: Tongariro

Legal Description: Part 2E Maori Block,

Waimanu Block, VIII Puketi

Survey District.

Special Conservation Woodrose (Dactylanthus taylori), kowhai grove at lower margin. Kiwi.

Values:

Earth Data: Steep. Part of Kakaramea Tihea volcanic massif, yellow/brown pumice soils

and loams.

Flora: Mixed podocarp forest, red beech-mountain beech forest, kowhai forest.

Square sedge peat bog.

Fauna: Most common forest birds. Remnant brown kiwi population. Seasonal use by

kereru, kaka, long-tailed cuckoo. Long-tailed bat common. Fernbird in scrub adjoining Lake Otamangakau. NZ falcon. Kokako reported 1996/1997.

Fishery Values: Conservation value in protection of relieving waters of Lake Otamangakau.

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa.

**Historic Resources:** Skid sites. Dwellings related to past logging activities. Timber milling.

Site Numbers Present: Nil

**Recreation:** Hunting low. Remote 40%, backcountry drive-in 60%.

Facilities: Nil

Animal Pests: Possums - bovine Tb endemic, red deer in low numbers, pigs, mustelids.

Plant Pests: Heather (Calluna vulgaris), broom (Cytisus scoparius), Pinus contorta. Refer

Tongariro/Taupo Problem Plant Strategy.

Fences: Not applicable.

Access: Adjacent Wairehu Canal Road. Access through Rotoaira forest land to fishery

illegal (Lake Otamangakau).

Concessions: Nil

Other Issues: Illegal firewood removal.

Management Priority: Manage as contiguous to 60025. Investigate for gazettal to Tongariro National

Park. Investigate public access to block.

Management Work Done: Pinus contorta removed. Aerial 1080 drop by Environment Waikato. Woodrose

(Dactylanthus taylori) surveys 1999.

Last Update: April 2000

Bibliography:	Fenwick, G.T., <u>The volcanology, petrology and geochemistry of Mt. Pihanga volcano.</u> , Tongariro Volcanic Centre New Zealand, 1996

**Conservation:** 

2

Recreation:

3

3

Historic:

Value:

Last Update:

Bibliography:

Site Name: Tokaanu Stream Conservation Unit No.: 60108 Status: Recreation Reserve 9.7298 File Reference: **RES 045** Area (ha): Area Office: Turangi/Taupo Map Reference: T19 490 462 Place: Taupo Basin Management Plan: No Local Authority: Taupo District Council **Ecological District:** Taupo Legal Description: Lot 1, DP 49118, blocks V, VI, IX, X Puketi Survey District. **Special Conservation** Important wetland habitat. Values: Earth Data: Streamside, lakeshore, pumice alluvium. Flora: Raupo reedland, introduced grasses. Fauna: Bittern, spotted crake, fernbird, range of waterfowl including dabchick, duck, swan, heron. Fishery Values: Tokaanu Stream significant spawning stream. Key stream in fishery management system. Information held in the domain of Ngati Tuwharetoa. Tangata Whenua Issues: **Historic Resources:** Unknown Site Numbers Present: Nil Recreation: Gamebird hunting. Rural natural remnant 100%. **Facilities:** Limited boat storage at jetty. Three-bedroom house. **Animal Pests:** Mustelids, possums. **Plant Pests:** Crack willow. Refer Tongariro/Taupo Problem Plant Strategy. Fences: Fenced on southern boundary. Boat access, over private land from State Highway 41. Access: Nil **Concessions:** Other Issues: DOC pressured to be involved in willow and plant pest removal, upstream dumping of rubbish. Maintaining of conservation values over undisturbed area of site. **Management Priority:** Management Work Done: Removal of Tokaanu fish trap. Possum control by regional council since 1992.

Value:	Historic:	2	Conservation:	1	Recreation:	3

April 2000

Unknown

Site Name: Shaw Reach Conservation Unit No.: 60109

**Status:** Conservation Area

Area (ha): 4.1885 File Reference: RES 048

Area Office: Turangi/Taupo Map Reference: T19 532 438

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

Legal Description: Section 2, Block X, Puketi

Survey District.

Special Conservation Nil

Values:

Earth Data: Marginal strip. River terrace, pumice alluvium.

Flora: Kanuka manuka scrub.

Fauna: Waterfowl.

Fishery Values: High fishery value. Angling access.

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Unknown

Site Numbers Present: Nil

**Recreation:** Fishing high, walking low, mountain biking low. Rural natural remnant 100%.

Facilities: Nil

**Animal Pests:** Possums – bovine Tb endemic, mustelids, rabbits.

Plant Pests: Crack willows. Refer Tongariro/Taupo Problem Plant Strategy.

Fences: Nil

Access: Hirangi Road via private land or Crescent Reserve.

Concessions: Nil
Other Issues: Nil

Management Priority: Manage in conjunction with 60162.

Management Work Done: Possum control by Waikato Regional Council. Trapping since 1991.

Last Update: April 2000 Bibliography: Unknown

Site Name: Spa Road Conservation Unit No.: 60111

Status: Local Purpose Reserve

Area (ha): 0.7994 File Reference: REL 002

Area Office: Turangi/Taupo Map Reference: U18 778 756

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

**Legal Description:** Sections 1, SO 59212

consisting of part sections 1-13, Section 1 DPS 11680.

Special Conservation Nil

Values:

Earth Data: Flat, highly modified urban site, pumice deposits.

Flora: Amenity planting, mown grass.

Fauna: Not applicable.

Fishery Values: Nil

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Unknown

Site Numbers Present: Nil

Recreation: Urban 100%.

Facilities: Waiora House, Plunket Society

Animal Pests: Cats, dogs, mustelids, rats, mice.

Plant Pests: Refer Tongariro/Taupo Problem Plant Strategy.

**Fences:** Fully fenced.

Access: Adjacent Spa Road and Scannell Street.

Concessions: (TDC) Wairoa House; (DOC) TT/186/STR - Taupo Plunket Society and

short-term grazing permit.

Other Issues: Taupo District Council appointed to control and manage sections 1-7; sections

8-13 and DPS 11680 managed by the department.

Management Priority: Monitor site.

Management Work Done: Removal of cypress shelter belt. Manage concessions.

Last Update: April 2000 Bibliography: Unknown

Site Name: Turangi Workshop Conservation Unit No.: 60114

Status: Conservation Area

Area (ha): 1.1700 File Reference: ACC 012

Area Office: Turangi/Taupo Map Reference: T19 523 417

Place: Taupo Basin Management Plan: No

Local Authority: Taupo District Council Ecological District: Taupo

**Legal Description:** Part Waipapa 1E2C Block.

Special Conservation Nil

Values:

Earth Data: Flat, pumice alluvium.

Flora: Nil
Fauna: Nil
Fishery Values: Nil

Tangata Whenua Issues: Ngati Turangitukua have first right of refusal on any sale.

Historic Resources: Unknown

Site Numbers Present: Nil

Recreation: Urban 100%.

Facilities: Workshop complex, helipad.

Animal Pests: Nil

Plant Pests: Not applicable.

**Fences:** Completely security fenced.

Access: From Dekker Drive which is adjacent to State Highway 1.

Concessions: Nil

Other Issues: Undergound fuel storage - registered as dangerous goods with Taupo District

Council.

Management Priority: Status quo.

Management Work Done: Site maintenance.

Last Update: April 2000
Bibliography: Unknown

Site Name: Highway 47A Conservation Unit No.: 60116

Status: Conservation Area

Area (ha): 0.1937 File Reference: RES 048

Area Office: Turangi/Taupo Map Reference: T19 386 345

Place: Tongariro-Ruapehu Management Plan: No

Local Authority: Taupo District Council Ecological District: Tongariro

Legal Description: Closed Road in Block V,

Pihanga Survey District.

**Special Conservation** Unknown

Values:

Earth Data: Ring plain, andesite.

Flora: Unknown
Fauna: Unknown

Fishery Values: High values for water input to Otamangakau, spawning stream.

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Unknown

Site Numbers Present: Nil

**Recreation:** Backcountry drive-in 100%.

Facilities: Nil

Animal Pests: Unknown

Plant Pests: Unknown. Refer Tongariro/Taupo Problem Plant Strategy.

Fences: Not applicable.

Access: Adjacent State Highway 47A.

Concessions: Nil

Other Issues: Unknown

Management Priority: Full general survey required.

Management Work Done: Nil

Last Update: April 2000
Bibliography: Unknown

Site Name: Graces Road Conservation Unit No.: 60117

Status: Conservation Area

 Area (ha):
 0.2989
 File Reference:
 RES 048

 Area Office:
 Turangi/Taupo
 Map Reference:
 T19 535 443

Place: Taupo Basin Management Plan: No

Local Authority: Taupo District Council Ecological District: Taupo

Legal Description: Part Section 3, Block X,

Puketi Survey District.

**Special Conservation** Unknown

Values:

Earth Data: River terrace, pumice alluvium.

Flora: Introduced grasses.

Fauna: Stock.
Fishery Values: Nil

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Unknown
Site Numbers Present: 8119

**Recreation:** Rural 100%.

Facilities: Nil
Animal Pests: Stock.

Plant Pests: Refer Tongariro/Taupo Problem Plant Strategy.

Fences: Fenced on road boundary.

Access: Adjacent Graces Road.

Concessions: Nil
Other Issues: Nil

Management Priority: Confirm site use. Investigate for exchange/disposal.

Management Work Done: Nil

Last Update: April 2000
Bibliography: Unknown

Site Name: Waipapa Road Conservation Unit No.: 60118

Status: Conservation Area

Area (ha): 0.0746 File Reference: RES 048

Area Office: Turangi/Taupo Map Reference: T19 540 427

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

Legal Description: Closed Road in Block X,

Puketi Survey District.

**Special Conservation** Unknown

Values:

Earth Data: Flat, pumice alluvium.

Flora: Introduced grasses, amenity planting.

Fauna: Nil
Fishery Values: Nil

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Unknown

Site Numbers Present: Nil

**Recreation:** Walking high, biking high. Urban 100%.

Facilities: Nil

Animal Pests: Not applicable.

Plant Pests: Refer Tongariro/Taupo Problem Plant Strategy.

Fences: Not applicable.

Access: Adjacent State Highway 1, adjacent Waipapa Road.

Concessions: Nil

Other Issues: Roading encroaches onto site.

Management Priority: Investigate vesting in Taupo District Council. Exchange or disposal.

Management Work Done: Nil

Last Update: April 2000
Bibliography: Unknown

Site Name: Tokaanu Conservation Unit No.: 60121

**Status:** Conservation Area

Area (ha): 362.3089 File Reference: RES 044

Area Office: Turangi/Taupo Map Reference: T19 506 456

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

Legal Description: Various

**Special Conservation** Outstanding biodiversity, wetland ecosystem and associated species.

Values: Leptocarpus rushland outside normal coastal range. Part of bird's-foot delta.

Maunganamu lava dome has regional geopreservation status.

**Earth Data:** One of the finest bird's-foot deltas in New Zealand.

Flora: Raupo reedland, Leptocarpus rushland, Carex-Juncus sedge/rushland, Eleocharis

sedgeland, manuka scrub, pasture.

Fauna: Most common forest birds, bittern, spotless crake, fernbird. Waterfowl (48

species recorded) both resident and seasonal.

**Fishery Values:** Lake trout fishing. High habitat values.

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Earth walls, ditches, banks, pa, historic jetty adjacent.

Site Numbers Present: 6389, 8103

**Recreation:** Boating high, fishing high. Game bird hunting high. Rural natural 100%.

Facilities: Access roads (sealed and metal), boat ramps, jetty.

**Animal Pests:** Possums - bovine Tb endemic, horses, cattle, goats, mustelids.

Plant Pests: *Juncus articulatus*, willow, blackberry, gorse, broom (*Cytisus scoparius*), heather

(Calluna vulgaris), bamboo. Refer Tongariro/Taupo Problem Plant Strategy.

Fences: Some fencing of adjoining area leased to D R Church and along Genesis

boundary.

Access: Awamate Road, adjacent State Highway 41, Tailrace Road, Tokaanu Jetty

Road.

**Concessions:** TT/018/GRA - Michael Church and Paddy Henderson

Other Issues: Unlicensed horse trekking, motocross races and mountain bike activities need

to be formalised. Management of activities taking place on adjacent Genesis

land. Proposal for wetland boardwalk. Stock/horse trespass.

Management Priority: Protect biodiversity. Control plant pests. Resolve unauthorised commercial

activity. Complete Tokaanu swamplands exchange process and gazette as

scenic reserve.

Management Work Done: Ongoing possum control by Waikato Regional Council. Trapping and ground

poisoning since 1991. Signs (fishery). Mowing. Wilding pine control 1997. Part of PhD study on the South Taupo Wetland, completed 1998. 1080 aerial

drop 1000 ha from delta to Motuoapa August 1998.

Last Update: April 2000 Bibliography: Unknown

Site Name: Motuoapa Bay Conservation Unit No.: 60122

Status: Recreation Reserve

**Area (ha):** 0.6517 **File Reference:** REL 001

Area Office: Turangi/Taupo Map Reference: T19 589 483

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

**Legal Description:** Sections 1, 2, 3, 4 and 46,

Motuoapa Town, Block III, Tokaanu Survey District.

**Special Conservation** Motuoapa hot springs have regional geopreservation significance.

Values:

Earth Data: Lakeshore, terrace, pumice alluvium, sandy yellow/brown pumice soils.

Flora: Mown grass.

Fauna: Range of waterfowl along beachfront at marina includes bittern, dabchick,

duck, swan, shag, heron, grey teal, scaup.

Fishery Values: Nil

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Unknown

Site Numbers Present: Nil

Recreation: Unknown

Facilities: Unknown
Animal Pests: Unknown

Plant Pests: Refer Tongariro/Taupo Problem Plant Strategy.

Fences: Not applicable.

Access: Unknown

Concessions: Nil
Other Issues: Nil

Management Priority: Controlled and managed by Taupo District Council.

Management Work Done: 1080 aerial drop 1000 ha from delta to Motuoapa August 1998.

Last Update: April 2000
Bibliography: Unknown

Site Name: Makatote Conservation Unit No.: 60123

Status: Scenic Reserve

 Area (ha):
 100.2450
 File Reference:
 RES 063

 Area Office:
 Ruapehu
 Map Reference:
 \$20 160 127

Place: Plateau Forests Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Tongariro

**Legal Description:** Section 12 and part Sections 9

and 27, Block VIII, Manganui

Survey District.

Special Conservation Kaikawaka, cliff-face vegetation, streamside herbfield, blue duck. Water

Values: conservation order. Short-tailed bats. Makatote viaduct section has national

geopreservation significance. Woodrose (Dactylanthus taylori).

Earth Data: Ring plain, gorge.

Flora: Kaikawaka-kamahi forest, kamahi forest, Machaerina-mountain flax sedge cliff-

face tussockland, streamside herbfield, podocarp forest, broadleaved, maire.

Fauna: Most common forest birds. Seasonal use by kereru, kaka, long-tailed cuckoo,

shining cuckoo, rifleman, robin, kakariki. NZ falcon recorded in vicinity. Important blue duck habitat in Makatote River. Long-tailed bat likely, short-

tailed bat recorded.

**Fishery Values:** High fishery values. Conservation order in place.

Tangata Whenua Issues: Information held in the domain of Ngati Rangi and Tuwharetoa.

Historic Resources: Railway viaduct logging, milling activities, old bridge construction camp, old

timber mill, old coach road.

Site Numbers Present: Nil

Recreation: Kayaking low, rafting low, fishing low, hunting low. Backcountry drive-in

100%.

Facilities: Nil

Animal Pests: Possums, red deer present in low numbers, stock trespass, goats, mustelids.

Plant Pests: Broom (Cytisus scoparius), Pinus contorta. Refer Tongariro/Taupo Problem Plant

Strategy.

**Fences:** Boundary with adjoining owner on south-western side only partially fenced.

Access: Adjacent State Highway 4.

Concessions: Nil

**Other Issues:** Divided by road, railway and rivers, stock trespass.

Management Priority: Complete fencing arrangements. Manage to protect the corridor between

Erua Forest and Tongariro National Park.

Management Work Done: Boundary partially surveyed/cleared for fencing. Partially fenced. Pinus contorta

control ongoing as part of Erua Forest. Kamahi die-back investigations.

Hunting for goats.

Last Update: April 2000 Bibliography: Unknown

Site Name: Erua Conservation Unit No.: 60124

Status: Recreation Reserve

Area (ha):4.0469File Reference:RES 066Area Office:RuapehuMap Reference:\$20 164 170

Place: Plateau Forests Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Tongariro

**Legal Description:** Section 3, Block VI, Town of

Erua, Block IV, VI Managanui Survey District.

Special Conservation Wetland.

Values:

Earth Data: Flat wetland, pumice alluvium.

Flora: Flax tussockland, Gleichenia-Empodisma peat bog, Baumea peat bog.

Fauna: Most common forest birds, fernbird.

Fishery Values: Nil

Tangata Whenua Issues: Information held in the domain of Ngati Rangi.

Historic Resources: Nil
Site Numbers Present: Nil

**Recreation:** Nil. Backcountry drive-in 100%.

Facilities: Nil

Animal Pests: Hares, possums, rats.

Plant Pests: Pinus contorta, heather (Calluna vulgaris). Refer Tongariro/Taupo Problem Plant

Strategy.

Fences: Not applicable.

Access: Adjacent Erua Road.

Concessions: Nil
Other Issues: Nil

Management Priority: Manage as part of Erua Conservation Area.

Management Work Done: Pinus controla control with Erua Conservation Area. Full plant species list

completed 1999. Manage consistent with Erua Forest.

Last Update: April 2000
Bibliography: Unknown

Site Name: Ohakune Lakes Conservation Unit No.: 60125

Status: Scenic Reserve

Area (ha): 90.9361 File Reference: RES 078

Area Office: Ruapehu Map Reference: S20 147 940

Place: Tongariro-Ruapehu Management Plan: Yes

Local Authority: Ruapehu District Council Ecological District: Tongariro

Legal Description: Section 24B and Part Section

24C, Block VIII, Makotuku

Survey District.

**Special Conservation** Wetlands, podocarp forest, regenerating tawa, waahi tapu. **Values:** 

v di decoi

Earth Data: Extinct crater lakes, ring plain.

Flora: Mixed podocarp forest, manuka scrub, raupo reedland, flax tussockland, exotic

plantings, pasture.

**Fauna:** Most common forest birds. Seasonal use by kereru and a range of waterfowl.

Fishery Values: High fishery values. Commonly used by beginners. Release of trout.

**Tangata Whenua Issues:** Information held in the domain of the Ngati Rangi tribe.

**Historic Resources:** Pa sites, battle site, burial site, lake burial site - tapu. Tramline (logging).

Site Numbers Present: 6128

**Recreation:** Picnicking low, swimming low, kayaking low, fishing moderate. Rural 10%.

Rural natural 90%.

**Facilities:** Car park, picnic area/open space, a fishing platform, boat ramp.

Animal Pests: Possums, mustelids, dogs, cats, farm stock (trespass).

Plant Pests: Barberry (*Berberis*), ivy, blackberry, bathhurst, montbretia.

**Fences:** Completely fenced.

Access: Adjacent Lakes Road, State Highway 49.

**Concessions:** TT/068/GRA - B. McConachie

Other Issues: Conflict between recreational use and waahi tapu site, i.e., fishing - taking food

from lake, burial site. Informal track cuts through waahi tapu site.

Management Priority: Ecological assessment. Improve and maintain recreation facilities. Possum

control maintenance. Joint control with iwi, fencing off Rangatauaiti Lake

from stock and other sections of reserve.

Management Work Done: Management of site taken over by the department October 1993. Ongoing

possum control operations (trapping) trap catch 1% 1999, maintaining area with bait stations. Some maintenance of access road. Rubbish collection.

Removed fishing jetties and platform 1999.

Last Update: April 2000

Bibliography: Unknown

Value: 1 Conservation: 2 Recreation: 3

Site Name: Makaranui Conservation Unit No.: 60126

Status: Conservation Area

 Area (ha):
 0.2082
 File Reference:
 RES 078

 Area Office:
 Ruapehu
 Map Reference:
 \$20 118 954

Place: Tongariro-Ruapehu Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Tongariro

Legal Description: Section 48, Block VII,

Makotuku Survey District,

SO32699.

Special Conservation

Values:

Nil

Earth Data: Ring plain, mudstone.

Flora: Grass.
Fauna: Stock.
Fishery Values: Nil
Tangata Whenua Issues: Nil
Historic Resources: Nil
Site Numbers Present: Nil

**Recreation:** Nil. Rural 100%.

Facilities: Nil

Animal Pests: Unknown

Plant Pests: Refer Tongariro/Taupo Problem Plant Strategy.

**Fences:** Fully fenced but not on boundary.

Access: Adjacent State Highway 49.

Concessions: Nil
Other Issues: Nil

Management Priority: Assess for disposal/lease.

Management Work Done: Primary inspection.

Last Update: April 2000 Bibliography: Unknown

Value:	Historic:	3	Conservation:	3	Recreation:	3

Site Name: Aratiatia Rapids Conservation Unit No.: 60127

Status: Scenic Reserve

Area (ha): 93.6968 File Reference: RES 002

Area Office: Turangi/Taupo Map Reference: U17 847 834

Place: Taupo Basin Management Plan: No

Local Authority: Taupo Ecological District: Atiamuri

**Legal Description:** Part Section 4 and Section 17,

Block XI and Section 1, Block XV, Tatua Survey District.

Special Conservation River protection through buffer zones. Aratiatia Rapids has national

Values: geopreservation status.

Earth Data: River terrace, steep bank, pumice alluvium, rhyolite exposed.

Flora: Broadleaved species scrub, exotic plantings, pasture.

Fauna: Most common forest birds. Waterfowl abundant along river. NZ falcon.

**Fishery Values:** Low fishery values.

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa and Ngati Tahu.

**Historic Resources:** Travel route. Affected by hydroelectric development.

**Site Numbers Present:** 6426, 6427, 6428

**Recreation:** Walking high, mountain biking moderate, sightseeing high, picnicking low,

swimming low, boating moderate. Rural natural remnant 100%.

**Facilities:** Viewpoints, walking tracks, picnic areas/open space, toilets (flush), boat ramp,

access roads (metal).

Animal Pests: Possums, cats, stoats, rats, rabbits.

Plant Pests: Pines, lupin (*Lupinus*), broom (*Cytisus scoparius*), gorse, Himalayan honeysuckle

(Leycesteria formosa). Refer Tongariro/Taupo Problem Plant Strategy.

Fences: Fenced adjacent Landcorp boundary.

Access: Aratiatia Road.

Concessions: Nil

Other Issues: Mountain biker/walker conflict. Unauthorised camping. Jet boating noise and

wash impacts. Logging trespass, neighbouring landowner. Illegal dumping of waste and car wrecks. Toilets due to be removed due to vandalism. Access

road to be removed.

Management Priority: Restore logging areas. Improve recreation facilities. Upgrade walking track.

Management Work Done: Maintenance of recreation facilities. Water supply and toilet upgrade. Plant

pest control. New signs. Wilding pines removed. Boundary fence next to

Landcorp land upgraded.

Last Update: April 2000

Bibliography: Unknown

Value: Historic: 3 Conservation: 2 Recreation: 3

Site Name: Runanga Armed Constabulary Conservation Unit No.: 60128

Status: Historic Reserve

Area (ha):5.9185File Reference:REH 003Area Office:Turangi/TaupoMap Reference:V19 131 453

Place: Kaimanawa-Moawhango Management Plan: No

Local Authority: Taupo District Council Ecological District: Kaimanawa

Legal Description: Lot 1, DPS 12155, Block IX

Runanga Survey district.

**Special Conservation** Redoubt earthworks.

Values:

Earth Data: Hilltop site sloping to stream, yellow/brown pumice soils.

Flora: Red tussock-monoao shrubland, mixed podocarp-broadleaved species forest

(remnant).

Fauna: Most common forest birds, fernbird.

Fishery Values: Nil

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa.

**Historic Resources:** New Zealand wars site. Redoubt earthworks.

Site Numbers Present: Nil

**Recreation:** Nil. Backcountry drive-in 100%.

Facilities: Nil

Animal Pests: Possums, red deer, pig.

Plant Pests: Pinus contorta, broom (Cytisus scoparius). Refer Tongariro/Taupo Problem Plant

Strategy.

Fences: Nil

**Access:** Foot access only off State Highway 5.

Concessions: Nil

Other Issues: New Zealand Historic Places Trust appointed to control and manage. Threat

to redoubt earthworks from activities related to management of adjacent

plantation forest.

Management Priority: Fence part boundary between reserve and plantation. Liaise with adjacent

exotic forest owner.

Management Work Done: Boundary identification. Pinus contorta removal. Liaison with Historic Places

Trust. On-site investigation August 1999. Site records and report completed.

Last Update: April 2000
Bibliography: Unknown

Value: Historic: 1 Conservation: 3 Recreation: 3

Site Name: Pukepoto Conservation Unit No.: 60129

Status: Ecological Area

 Area (ha):
 1906.1908
 File Reference:
 FOP 008

 Area Office:
 Turangi/Taupo
 Map Reference:
 \$19 296 443

Place: Plateau Forests Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Taumarunui

and Tongariro

**Legal Description:** Sections 1 and 2, Block X,

sections 1, 2, 3, 4, 5, 6, 7 and 8, Block IX, sections 1 and 2 Block XIII, sections 1 and 2 Block XIV, Maungaku Survey

District.

**Special Conservation** Limestone associations, wetland.

Values:

Earth Data: Steep slopes, Maungaku andesite cone, siltstone/sandstone, yellow/brown

soils.

Flora: Mixed podocarp forest, mixed podocarp-broadleaved species forest, Baumea

peat bog.

Fauna: Most common forest birds. Seasonal use by kereru, kaka, long-tailed cuckoo,

shining cuckoo, robin, kakariki. NZ falcon recorded in vicinity. Long-tailed bat likely, short-tailed bat possible. Important brown kiwi population. All

major rivers and streams hold significant blue duck populations.

Fishery Values: High headwaters fishery values. Eels present.

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

**Historic Resources:** Extensive milling in northern and eastern blocks.

Site Numbers Present: Nil

**Recreation:** Hunting moderate, kayaking low, rafting low, fishing moderate. Remote 85%.

Backcountry drive-in four-wheel-drive 15%.

Facilities: Nil

Animal Pests: Possums - bovine Tb endemic, red deer in moderate numbers with high

trophy potential, goats, pigs.

Plant Pests: Buddleia, *Pinus contorta*. Refer Tongariro/Taupo Problem Plant Strategy.

Fences: Not applicable.

Access: Foot, river access only. Four-wheel-drive access to boundary from State

Highway 47. Four-wheel-drive vehicle access over private land, Rotoaira

Forest.

Concessions: Nil

Other Issues: Private land limits easy access. Timber and firewood trespass. Goat control

required.

Management Priority: General survey 1993/94. Goat control. Protect water quality for fishery.

Management Work Done: Two exclosure plots present to monitor ungulate impacts (established 1984).

All plots remeasured 1999. *Pinus contorta* removal from wetland. DOC funded 1080 operation, winter 1997. Nil residual trap catch 1997. Full plant species

list 1999.

Last Update: April 2000 Bibliography: Unknown

Value: Historic: 2 Conservation: 2 Recreation: 3

Site Name: Waituhi-Kuratau Conservation Unit No.: 60130

Status: Scenic Reserve

 Area (ha):
 1318.9445
 File Reference:
 RES 051

 Area Office:
 Turangi/Taupo
 Map Reference:
 T18 340 545

Place: Plateau Forests Management Plan: No

Local Authority: Taupo District Council and Ecological District: Taumarunui

Ruapehu District Council and Taupo

Legal Description: Various

Special Conservation Mature forest, good number of mid-range totara, red tussock, Pittosporum

Values: turneri, woodrose (Dactylanthus taylori), Gratiola nana.

Earth Data: Rolling and dissected uplands, Jurassic greywacke, Miocene sediments,

Kakaramea andesite, Whakamaru ignimbrite, pumice alluvium, yellow/brown

soils, podzolized in places.

Flora: Mixed remnant and secondary podocarp-broadleaved species forest, red

tussock-monoao shrubland, bog pine-mountain toatoa forest, square sedge-Gleichenia wetland. Pittosporum turneri, woodrose (Dactylanthus taylori) present.

Fauna: Most common forest birds. Remnant brown kiwi population likely,

particularly 100-Acre Bush. Seasonal use by kereru, kaka, long-tailed cuckoo, shining cuckoo, robin, kakariki. Long-tailed bat present, short-tailed bat

possible. NZ falcon recorded in vicinity.

Fishery Values: Nil

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Milling.
Site Numbers Present: 6391

**Recreation:** Sightseeing high, hunting moderate. Backcountry drive-in 100%.

Facilities: Viewpoint, car park.

Animal Pests: Possums, bovine Tb endemic, red deer present in low numbers, goats, pigs.

Plant Pests: Buddleia, broom (Cytisus scoparius), heather (Calluna vulgaris), blackberry. Refer

Tongariro/Taupo Problem Plant Strategy.

**Fences:** Completely fenced on southern boundary with adjoining farmland.

Access: Adjacent State Highway 41.

Concessions: Nil

Other Issues: Important viewpoint on DOC-administered land on Waituhi lookout should

be considered for management by Transit. SH 41 re-alignment.

Management Priority: Protect threatened plants. Improve viewpoint facilities. Control goats.

General survey of reserve corridor. Check status of kiwi population.

Blackberry control. Protect water quality for fisheries.

Management Work Done: Waikato Regional Council involved in aerial 1080 poisoning winter 1997.

Blackberry control on boundary fencing entire 100-Acre Bush 1992/1993. Goat control. General survey undertaken of most of reserve. Annual woodrose (*Dactylanthus taylori*) monitoring and caging. Bait station in 100-Acre Bush Block to protect woodrose (*Dactylanthus taylori*). Mistletoe seeding trials. Cattle removal 1999. Ongoing fencing management. *Pittosporum turneri* survey, research and monitoring (ongoing). Full plant species list (1999). Druce

species list (Kuratau clearing). New lookout at Waituhi 2000.

Last Update: January 2001 Bibliography: Unknown

Value: Historic: 3 Conservation: 2 Recreation: 3

Site Name: Tirohanga Conservation Unit No.: 60132

Status: Recreation Reserve

Area (ha):0.7885File Reference:RES 043Area Office:Turangi/TaupoMap Reference:T17 635 995

Place: Taupo Basin Management Plan: No

Local Authority: Taupo District Council Ecological District: Atiamuri

**Legal Description:** Section 35, Block XII,

Atiamuri Survey District.

**Special Conservation** Unknown

Values:

Earth Data: Stream edge. Flat, pumice soils.

Flora: Broadleaved species forest. Bracken fernland.

**Fauna:** Some common forest birds.

Fishery Values: Nil

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa and the Whanganui

tribes.

Historic Resources: Unknown

Site Numbers Present: Nil

**Recreation:** Rural natural 100%.

Facilities: Nil

**Animal Pests:** Possums, mustelids, rats, rabbits.

Plant Pests: Broom (Cytisus scoparius). Refer Tongariro/Taupo Problem Plant Strategy.

Fences: Nil

Access: Adjacent Tirohanga Road.

Concessions: Nil
Other Issues: Nil

Management Priority: Assess for disposal.

Management Work Done: Primary survey.

Last Update: April 2000

Bibliography: Unknown

Value: Historic: 3 Conservation: 3 Recreation: 3

Site Name: Pokuru Road Conservation Unit No.: 60133

Status: Conservation Area

Area (ha): 0.4696 File Reference: RES 043

Area Office: Turangi/Taupo Map Reference: T17 633 986

Place: Taupo Basin Management Plan: No

Local Authority: Taupo District Council Ecological District: Atiamuri

Legal Description: Section 35, Block XVI,

Whakamaru Survey District.

**Special Conservation** Wetland.

Values:

Earth Data: Stream edge, flat, pumice soils.

Flora: Flax tussockland, pasture.

Fauna: Domestic stock.

Fishery Values: Not applicable.

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa and Ngati Tahu.

Historic Resources: Nil
Site Numbers Present: Nil

**Recreation:** Rural natural 100%.

Facilities: Nil

Animal Pests: Rabbits, hares.

Plant Pests: Domestic plant pests. Refer Tongariro/Taupo Problem Plant Strategy.

Fences: Nil

Access: Adjacent Pokuru Road, adjacent Tirohanga Road.

Concessions: Nil

Other Issues: Currently being farmed.

Management Priority: Assess for disposal.

Management Work Done: Primary site inspection.

Last Update: April 2000 Bibliography: Unknown

Value: Historic: 3 Conservation: 2 Recreation: 3

Site Name: Mangakowhiriwhiri Stream Conservation Unit No.: 60134

Status: Conservation Area

 Area (ha):
 15.5790
 File Reference:
 RES 013

 Area Office:
 Turangi/Taupo
 Map Reference:
 T17 542 015

Place: Taupo Basin Management Plan: No

Local Authority: Taupo District Council Ecological District: Atiamuri

**Legal Description:** Part Section 44, Block X, Whakamaru Survey District.

**Special Conservation** Spawning stream, mixed podocarp, tenekaha stand.

Values:

Earth Data: Steep gorge, Whakamaru ignimbrite.

Flora: Tanekaha pole stand, kamahi-mahoe-treefern forest, rewarewa-kamahi forest.

Plant species list of reserve and adjoining forest. 140 indigenous species.

**Fauna:** Most common forest birds.

**Fishery Values:** High fishery habitat values. Spawning stream.

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa and Ngati Tahu.

Historic Resources: Nil
Site Numbers Present: Nil

**Recreation:** Rural natural remnant 100%.

Facilities: Nil

Animal Pests: Possums, goats escaped in 1988 and established a feral population.

Plant Pests: Pines, gorse, broom (Cytisus scoparius), blackberry, burdock. Refer

Tongariro/Taupo Problem Plant Strategy.

Fences: Fences in poor condition. Some upgrades completed.

Access: Over private land off Parataniwha Road or Kaahu Road.

Concessions: Nil

Other Issues: Site upstream (approximately three kilometres) has been managed as reserve

since 1988. Extension of protected area needed (only one side of stream

protected). Access. Extension of reserve boundaries.

Management Priority: Complete site investigation. Identify boundary. Extension of reserve to

protect other significant areas. Possum population assessment.

Management Work Done: Goat control by the department. Complete aerial survey and assessment 1995

(ongoing monitoring). Manawatu/Wanganui Regional Council 1080 operation

winter 1998. Fencing inventory and upgrade. Plant species list (1994)

Last Update: April 2000
Bibliography: Unknown

Value: Historic: 3 Conservation: 2 Recreation: 3

Site Name: Whakamaru Conservation Unit No.: 60135

Status: Conservation Area

 Area (ha):
 20.0140
 File Reference:
 RES 013

 Area Office:
 Turangi/Taupo
 Map Reference:
 T17 560 041

Place: Taupo Basin Management Plan: No

Local Authority: Taupo District Council Ecological District: Atiamuri

**Legal Description:** Sections 33 and 34, Block XI, Whakamaru Survey District,

SO 53256 and Section 1, SO 60929.

Special Conservation

Values:

Unknown

Earth Data: River terrace, ignimbrite.

Flora: Unknown

Fauna: Most common forest birds. Waterfowl along lakeshore.

Fishery Values: Moderate lakeshore angling values.

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa and Ngati Tahu.

Historic Resources: Unknown
Site Numbers Present: 6423

**Recreation:** Boating moderate, picnicking low, swimming low. Urban 100%.

Facilities: Picnic areas/open space, access road.

Animal Pests: Possums, rabbits, goats.

Plant Pests: Broom (Cytisus scoparius), gorse, blackberry. Refer Tongariro/Taupo Problem

Plant Strategy.

**Fences:** Poor condition.

Access: Adjacent Pokuru Road.

Concessions: TT/133/EAS - Tuaropaki Power Company.

Other Issues: Rubbish dumping from Whakamaru village. Land sale (small part of no

conservation value).

Management Priority: Full general survey required. Possible transfer of control and management of

Section 1, SO 60929 and Section 33 to Taupo District Council.

**Management Work Done:** Goat control by the department. Ongoing possum control.

Last Update: April 2000
Bibliography: Unknown

Value: Historic: 3 Conservation: 3 Recreation: 3

Site Name: National Park Sections Conservation Unit No.: 60136

**Status:** Conservation Area

 Area (ha):
 2.3399
 File Reference:
 ACC 015

 Area Office:
 Turangi/Taupo
 Map Reference:
 \$19 175 229

Place: Plateau Forests Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Tongariro

Legal Description: Part sections 4 and 5, Block VII and Part section 2 and

Section 9, Block XI, Town of Waimarino.

**Special Conservation** Unknown

Values:

Earth Data: Ring plain, yellow/brown pumice soils.

Flora: Flax tussockland, Baumea peat bog.

Fauna: Unknown

Fishery Values: Not applicable.

**Tangata Whenua Issues:** Information held in the domain of Ngati Rangi and Ngati Tuwharetoa.

Historic Resources: Nil
Site Numbers Present: Nil

**Recreation:** Nil. Urban 100%.

Facilities: DOC staff accommodation.

Animal Pests: Common urban pests.

Plant Pests: Introduced grasses, Pinus contorta, heather (Calluna vulgaris). Refer

Tongariro/Taupo Problem Plant Strategy.

**Fences:** Amenity fencing.

**Access:** From National Park township roading infrastructure.

Concessions: Nil

Other Issues: Departmental housing situated on some sections. Some sections vacant, some

contain housing.

Management Priority: Maintain status quo.

Management Work Done: Pinus contorta control 1998.

Last Update: April 2000 Bibliography: Unknown

Value: Historic: 3 Conservation: 3 Recreation: 3

Site Name: Five Mile Bay Conservation Unit No.: 60137

Status: Recreation Reserve

 Area (ha):
 56.6460
 File Reference:
 RES 007

 Area Office:
 Ruapehu
 Map Reference:
 U18 769 689

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

**Legal Description:** Part sections 37, 38 and 39,

Block VI, Tauhara Survey District and Closed Road in Block VI, Tauhara Survey District Section 1 SO 59452.

Special Conservation Protection of view across Lake Taupo. Containment of urban sprawl from

Values: Taupo into potential large open space, use for public, possible fluted pumice

blocks from 186 AD Taupo eruption.

Earth Data: Rolling foreland, old lakeshore, pumice alluvium and deposits.

Flora: Bracken fernland, raupo reedland, shoreline turf herbfield, pines, pasture.

Fauna: Some waterfowl use of wetland areas.

Fishery Values: Lakeside fishing moderate-high.

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Nil
Site Numbers Present: 6405

**Recreation:** Sightseeing high, picnicking moderate, swimming high, fishing high, boat

launching moderate, water-skiing moderate. Rural 100%.

Facilities: Access road, car parks, water-ski lanes, toilet (dry vault), picnic areas/open

space.

Animal Pests: Possums, rabbits, cats.

Plant Pests: Gorse, willow, blackberry, pines, Egeria densa. Refer Tongariro/Taupo Problem

Plant Strategy.

**Fences:** Pasture areas fenced.

Access: From State Highway 1. Boat access.

Concessions: TT/143/GRA - C. and D. Purvis.

Other Issues: Unauthorised camping. Upgrading planned to be completed by mid-1996,

vandalism, rubbish. Manage in consultation with Internal Affairs for

consistency and public relations.

Management Priority: Continue monitoring past Egeria densa site (last monitored 12 July 1993, C

Jones). Maintain for viewing corridor. Upgrade for recreational use.

Placement of picnic tables. Control of rabbits.

Management Work Done: Draft management plan produced. Egeria densa removed and monitored.

McDonalds planting commenced 1994 (six year programme). Pines thinned. Ongoing possum control works. RPMS *Exacerbata* rabbit control September 1998. Lions' Walk has been extended from Four Mile Bay. Recreational facilities improved. Toilets upgraded. Reserve upgraded for day use. Consultation with Internal Affairs regarding ski lane. Contract mowing,

fencing to enclose recreation area. Rabbit control (RPMS obligation).

Last Update: April 2000 Bibliography: Unknown

Value:	Historic:	3	Conservation:	2	Recreation:	2

Site Name: Mine Bay Conservation Unit No.: 60138

Status: Scenic Reserve (leasehold)

Area (ha): 173.2000 File Reference: RES 020
Area Office: Turangi/Taupo Map Reference: T18 700 720

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

Legal Description: Part Rangatira 8B1 Block,

Block V Tauhara Survey District and Block V Tuhingamatea Survey District.

**Special Conservation** Soil and water values. Scenic backdrop to lake.

Values:

Earth Data: Steep rhyolite bluffs, rocky headland. Landlocked to lake. Pumice deposits,

yellow/brown pumice soils.

Flora: Fivefinger-kohuhu forest, kanuka forest, kowhai-kanuka forest, cliff or

outcrop rockland, pohutukawa (Metrosideros excelsa) forest, bracken fernland,

ongaonga.

Fauna: Most common forest birds, fernbird. Range of waterfowl along lakeshore.

Black-backed gull roosts/nests along bluffs.

Fishery Values: Moderate.

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

**Historic Resources:** Maori pa and kumara pits.

Site Numbers Present: Nil

**Recreation:** Backcountry drive-in 100%.

Facilities: Nil

Animal Pests: Possums, pigs (seasonal), red deer present in low numbers, cats, rats,

mustelids.

Plant Pests: Pines, crack willow, gorse. Refer Tongariro/Taupo Problem Plant Strategy.

Fences: Not applicable.

Access: Boat access.

Concessions: Nil
Other Issues: Nil

Management Priority: Exterminate crack willow.

Management Work Done: Ongoing possum control operation (aerial 1080 carrot baits) August 1994.

Boundary survey. Protection of water quality for fishery values. Pohutukawa protection through possum control work (bait stations). Fencing inventory

1999. Full reserves report 1989/1990.

Last Update: April 2000 Bibliography: Unknown

Value: 2 Conservation: 3 Recreation: 3

Site Name: Waipouwerawera Stream Conservation Unit No.: 60139

**Status:** Conservation Area

Area (ha): 28.2843 File Reference: RES 058

Area Office: Turangi/Taupo Map Reference: U18 750 800

Place: Taupo Basin Management Plan: No

Local Authority: Taupo District Council Ecological District: Atiamuri

Legal Description: Parts Oruamuturangi and

Rangatira Blocks and Closed Road in Blocks XIII and XIV,

Tatua Survey District.

**Special Conservation** Thermal vegetation, particularly rare ferns if still present.

Values:

Earth Data: Steep-sided stream gully. Geothermal features, pumice alluvium, Huka

Formation.

Flora: Fivefinger-kohuhu forest, bracken fernland. Thermal vegetation.

**Fauna:** Some forest birds present, geothermal.

Fishery Values: Nil

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa and Ngati Tahu.

Historic Resources: Unknown

Site Numbers Present: Nil

**Recreation:** Nil. Rural natural remnant 100%.

Facilities: Nil

Animal Pests: Possums. Rabbits.

Plant Pests: Pines, Himalayan honeysuckle (Leycesteria formosa), blackberry. Refer

Tongariro/Taupo Problem Plant Strategy.

**Fences:** Well fenced where required.

Access: Adjacent State Highway 1. Poihipi Road. Huka Falls Road.

**Concessions:** Application for water easement by A. McLoughlin.

Other Issues: Nil

Management Priority: Full general survey required.

Management Work Done: Report on potential water consent. Manawatu/Wanganui Regional Council

ground possum control winter 1996 (ongoing).

Last Update: April 2000
Bibliography: Unknown

Value: Historic: 3 Conservation: 2 Recreation: 3

Site Name: Broadlands Road Conservation Unit No.: 60140

Status: Scenic Reserve

Area (ha):39.6220File Reference:RES 085Area Office:Turangi/TaupoMap Reference:U18 807 757

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

Legal Description: Section 1, SO 59446, blocks

II, III Tauhara Survey

District.

**Special Conservation** Outstanding geothermal features.

Values:

**Earth Data:** Pumice deposits, flat to moderate slope. Stream gully dissecting site.

Flora: Range of thermal vegetation. Postrate kanuka.

Fauna: Unknown

Fishery Values: Nil

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Unknown

Site Numbers Present: Nil

**Recreation:** Nil. Urban fringe natural remnant 80%. Urban fringe 20%.

Facilities: Nil

Animal Pests: Unknown

Plant Pests: Refer Tongariro/Taupo Problem Plant Strategy.

**Fences:** To be replaced.

Access: Adjacent Broadlands Road.

Concessions: Nil

Other Issues: Proposed geothermal power development, building of Taupo bypass through

reserve. Potential for State Highway 1 bypass over reserve.

Management Priority: Full general survey. Wilding pine removal.

Management Work Done: Wilding pine removal. Vegetation survey 1997. Protection of environmental

values from geothermal development. Landcare reserves study 1996.

Last Update: April 2000
Bibliography: Unknown

Value: 2 Conservation: 2 Recreation: 3

Site Name: Huka Falls (left bank) Conservation Unit No.: 60141 Crown Land, administered by Status: the department Area (ha): 38.0092 File Reference: WTP 006; RES 011 Area Office: Turangi/Taupo Map Reference: U18 790 790 Place: Taupo Basin Management Plan: No Local Authority: Taupo District Council **Ecological District:** Taupo Legal Description: Areas A, B and C on SO 59910 and Area A on SO 59911 situated in Block XIV Tatua Survey District. **Special Conservation** Forms part of riparian wildlife corridor. Values: Earth Data: River terraces, faces, Huka Formation, pumice deposits. Flora: Five finger-kohuhu forest, manuka-kanuka scrubland. Most common forest birds. Waterfowl along Waikato River. Fauna: Fishery Values: Moderate. Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa and Ngati Tahu. **Historic Resources:** Travel route, shelter, rocky overhangs. Site Numbers Present: 6434, 6436, 6437 Recreation: Walking high, sightseeing high. Facilities: Car park, toilets, walking tracks, viewing platform, picnic table, bridge, safety rails, signs. **Animal Pests:** Possums, rats. **Plant Pests:** Wilding pines, Himalayan honeysuckle (Leycesteria formosa), blackberry, gorse, broom (Cytisus scoparius), willow, climbing spindle berry (Celastrus orbiculatus). Fences: Safety fences Access: From Huka Falls Rd. Fast access off Spa/Huka/Aratiatia Walkway. **Concessions:** Management agreement with Huka Falls Trust. Other Issues: Gazettal as a scenic reserve. Pressure for tourism development, jet boating noise, over 900,000 visitors through car park. Area awaiting gazettal. Management Priority: Management agreement with Commisioner of Crown Lands. Management Work Done: Car park maintenance, water supply, track maintenance, QCM structure inventory, visitor surveys. Toilet block replaced 2000. Reserves survey 1999. Last Update: April 2000 Bibliography: Unknown Value: Conservation: 2 Recreation:

Historic:

1

1

Values:

Site Name: Craters of the Moon Conservation Unit No.: 60141/1

Status: Crown Land, administered by

the department

Area (ha): File Reference: WTP 001

Area Office: Turangi/Taupo Map Reference: U17 765 805

Place:Wairakei VillageManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

Legal Description: Part Wairakei Block, DP

25307.

**Special Conservation** Geothermal: former site of a large concentration of geysers; first case study of

effects of intensive geothermal exploitation on a geothermal ecosystem. Regional geothermal preservation significance, highly vulnerable. Geothermal ferns and fern allies uncommon. A key site for prostrate kanuka. *Dicranopteris linearis* habitat potentially threatened. This site and Waiora hilltop have most

extensive geothermal/lichen beds in NZ. Waahi tapu site.

Earth Data: Geothermal area, Taupo pumice, alluvium, Wairakei breccia. Pumice deposits;

numerous geothermal features including mudpools, blowholes, sinter deposits,

silica and other mineral deposit formations.

Flora: Thermal vegetation; large mossfield on dome with thermal fern allies, lichens,

liverworts; extensive prostrate kanuka scrubland on hillslopes, scattered monaoa/mingimingi, ground cover of thermal mosses, liverworts, ferns and fern allies; mingimingi-prickly mingimingi scrubland on footslopes with

occasional monoao, manuka, possibly Dicranopteris linearis.

Fauna: Unknown

Fishery Values: Nil

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa and Ngati Tahu.

**Historic Resources:** Significant washi tapu values. High level of modification through geothermal

power development projects.

Site Numbers Present: 6440, 6472

**Recreation:** Very high walking, 10 000 visitors per annum. Mountain biking, sightseeing.

Facilities: Access road, car park, kiosk, toilets, walking track boardwalk network, viewing

platforms, picnic tables, seats, interpretation panels.

Animal Pests: Possums, rabbits.

Plant Pests: Radiata pines, blackberry, broom (Cytisus scoparius), Himalayan honeysuckle

(Leycesteria formosa), pampas, buddleia, gorse on lower slopes. Refer

Tongariro/Taupo Problem Plant Strategy.

Fences: Not required.

Access: State Highway 1/ Karapiti Rd.

Concessions: Management agreement to operate visitor facility with Craters of the Moon

Trust.

Other Issues: Energy extraction will cause changes in soil temperatures altering habitat

gradients. Vulnerable to damage from human use - trampling, mountain bikes.

Area awaiting gazettal as scenic reserve.

Management Priority: Management agreement with Commissioner of Crown Lands. Maintain safe

walking/viewing, remove plant pest species.

Management Work Done: Maintenance of car park, toilet, tracks/boardwalk water supply, interpretation

panels, signs, pine felling, plant pest spraying. Area surveyed.

Last Update: April 2000 Bibliography: Unknown

Value: Historic: 1 Conservation: 1 Recreation: 1

Site Name: Alum Lakes Conservation Unit No.: 60141/2

Status: Crown Land administered by

the department

Area (ha): File Reference: WTP 001

Area Office: Turangi/Taupo Map Reference: U17 766 827

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

Legal Description: Part Wairakei Block, DP

25307.

**Special Conservation** Geothermal: former site of a large concentration of geysers; first case study of

effects of intensive geothermal exploitation on a geothermal ecosystem. Regional geothermal preservation significance, highly vulnerable. Geothermal ferns and fern allies uncommon. *Dicranopteris linearis* habitat potentially

threatened.

Earth Data: Geothermal area, Taupo pumice, alluvium, Wairakei breccia. Numerous

geothermal features including mudpools, blowholes, geyser, mineral lakes.

Flora: Mingimingi-prickly mingimingi scrubland with occasional monoao, manuka,

plant pesty adventives, possibly Dicranopteris linearis.

Fauna: Unknown

Fishery Values: Nil

Values:

Tangata Whenua Issues: Information held in the domain of Ngati Rauhoto.

Historic Resources: Significant waahi tapu values. Early European use via walking tracks from

main north-south highway and Wairakei Hotel. Hot pools used for cooking

and red ochre gathered.

Site Numbers Present: Nil

**Recreation:** Guided walking low (unauthorised).

Facilities: Unformed tracks.

Animal Pests: Possums, rabbits, hares.

Plant Pests: Radiata pines, blackberry, broom (Cytisus scoparius), Himalayan honeysuckle

(Leycesteria formosa), pampas, gorse on lower slopes. Refer Tongariro/Taupo

Problem Plant Strategy.

**Fences:** Good fences around Wairakei Tourist Park boundary.

Access: Through borefield with permission from Contact Energy. Through Wairakei

Tourist Park via old Karapiti Rd.

Concessions: Nil

Other Issues: Gazettal as a scenic reserve. Energy extraction will cause changes in soil

temperatures altering habitat gradients. Public safety through illegal guiding

activity on unformed tracks. Awaiting gazettal.

Management Priority: Produce management plan. Remove wilding pines. Plant pest spraying.

Secure public access. Provide interpretation. Develop public walking facilities.

Consider guiding concession.

Management Work Done: Area surveyed. Pines felled. Pampas sprayed. Safety barriers positioned.

Rabbit control (RPMS obligation). Landcare reserves survey 1998.

April 2000 Last Update: Bibliography: Unknown

Historic: Value: 1 **Conservation:** 1 Recreation: 3

Site Name: National Trout Centre Unit No.: 60142

Status: Crown land administered and

managed by the Department of Conservation for the purposes of a fish hatchery, anglers' campground; includes

a closed road.

Area (ha): 18.0592 File Reference: FIS 051

Area Office: Taupo Fishery Map Reference: T19 534 388

Place: Taupo Basin Management Plan: Yes

Local Authority: Taupo District Council

Legal Description: Parts Ohuanga North 1 and

1A blocks, parts Ohuanga South 1, 1A and 2B2 blocks, Section 2, Block III, Pihanga Survey District and Closed Road in Block III, Pihanga

Survey District.

**Special Conservation** Possibly largest kowhai in New Zealand.

Values:

**Earth Data:** River terrace, pumice alluvium.

Flora: Kowhai-kanuka forest, broadleaved species forest. Native amenity planting.

Fauna: Most common forest birds. Seasonal use by kereru. Tui prolific in spring

when kowhai flower.

Fishery Values: High value trout-breeding facility, public education interpretation centre.

Waihukahuka Stream high spawning value. High angling values on Tongariro

**Ecological District:** 

Tongariro

River.

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa.

**Historic Resources:** Old angler cabins/campsite, trout hatchery.

Site Numbers Present: 8101

**Recreation:** Trout hatchery viewing high, picnicking moderate, fishing high, rafting

moderate, kayaking moderate. Backcountry drive-in 100%.

Facilities: Access roads, car parks, walking tracks (disabled), open space/picnic areas,

toilets (flush, sealed vault), viewing chamber, interpretation displays, children's

fishing pond.

Animal Pests: Rabbits

**Plant Pests:** Gorse, broom (Cytisus scoparius), wilding pines. Refer site specific plant pest

strategy 1999.

Fences: Not applicable.

Access: Adjacent State Highway 1. 20 metre anglers' right of way along the Tongariro

River pursuant to section 14 of the Maori Land Amendment and Maori Land

Claims Adjustment Act 1926.

Concessions: Nil (Crown Land, not administered under the Conservation Act 1987).

Other Issues: Large degree of community involvement in development of facility. Visitor

amenities and site planning for public use undertaken in conjunction with

Tongariro National Trout Centre Society.

Management Priority: Maintain ongoing structure with interested parties for development.

Development of advocacy role.

Management Work Done: Extensive visitor facility/service and site management. Redesign 1999.

Last Update: April 2000
Bibliography: Unknown

Value: Historic: 2 Conservation: 1 Recreation: 1

Site Name: Tokaanu Thermal Park and Conservation Unit No.: 60143

Maunganamu

Status: Recreation Reserve

 Area (ha):
 47.4695
 File Reference:
 RES 050

 Area Office:
 Turangi/Taupo
 Map Reference:
 T19 495 448

Place: Taupo Basin Management Plan: No

Local Authority: Taupo District Council Ecological District: Tongariro

Legal Description: Section 1, Block V and

Section 7, Block VIII, Town of Tokaanu and Tokaanu 1A1

Block.

Special Conservation Possible presence of mistletoe (Korthalsella salicornioides) at Tokaanu.

Geothermal vegetation, *Leptocarpus* rushland. Manuka, three adult red beech, one adult totara, one adult miro. Significant geothermal activity (geysers, hot spring, mud pool, warm springs, sinter springs). Tokaanu/Waihi/Hipaua have

national geopreservation significance. Dwarf mistletoe.

Earth Data: Maunganamu rhyolite dome, significant local feature, geothermal activity,

pumice alluvium, hill slope, yellow/brown pumice, some organic soils.

Flora: Geothermal kanuka scrub, kanuka-manuka scrub, Leptocarpus rushland.

Kowhai-kanuka forest, broadleaved species forest, kanuka forest.

**Fauna:** Most common forest birds. Seasonal use by kereru.

Fishery Values: High. Tokaanu Stream has significant spawning value.

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Significant Maori history cultural significance. Bathing sites, old changing

shed. Cooking sites (steam box). Flour mill.

**Site Numbers Present:** 6382, 6384, 6385, 6386, 6387, 6388

**Recreation:** Walking high, swimming high, picnicking low. Rural natural remnant 50%.

Urban fringe natural remnant 50%.

Facilities: Car parks, thermal pools complex, walking tracks, picnic areas/open space.

On-site interpretation, access roads, tennis courts.

**Animal Pests:** Possums - bovine Tb endemic, mustelids.

Plant Pests: Broom (Cytisus scoparius), gorse, blackberry, Himalayan honeysuckle (Leycesteria

formosa), barberry (Berberis), ivy. Refer Tongariro/Taupo Problem Plant

Strategy.

Fences: Not applicable. Some fencing around pools and thermal areas. Protective

boundary fences and barriers.

Access: Adjacent State Highway 41.

Concessions: Management contract let for day-to-day control of Tokaanu Thermal Pools.

Values:

Other Issues: Thermal pool complex operated as a business unit. Increased visitor use could

threaten geothermal values. Area under claim by Ngati Tuwharetoa.

Management Priority: Upgrade thermal walk interpretation panels. Maunganamu Track promoted.

Confirm boundaries with Genesis on southern boundary of Maunganamu.

Protect edges of Tokaanu Stream.

Management Work Done: Tokaanu track maintenance. Replacement of totara cooking box for Tokaanu

people. Maunganamu track maintenance. Improvement of bridges to bring up to building code standard and new track information sign established at start of thermal walk. Maunganamu Track upgraded. Possum control works since 1992 (trapping). Ongoing structure inspections and upgrades. Full plant

species list 1999 (Maunganamu).

Last Update: April 2000

Bibliography: Dept of Lands and Survey, Tokaanu Memorial Park Domain: management

and development plan., Dept of Lands and Survey, Wellington, 1975

Dept of Lands and Survey, <u>Tokaanu: a comphrehensive study of settlement and recreation patterns in the Tokaanu area.</u>, Ministry of Works and

Development, Wanganui, 1976

Value: Historic: 2 Conservation: 1 Recreation: 1

Site Name: Te Porere Pa Conservation Unit No.: 60144

Status: Historic Reserve

 Area (ha):
 58.2711
 File Reference:
 REH 005

 Area Office:
 Turangi/Taupo
 Map Reference:
 T19 342 365

Place: Plateau Forests Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Tongariro

Legal Description: Parts Okahukura 6B and

8M2C1 blocks, Section 3, Block IV and Section 1, Block VIII, Tongariro Survey

District SO 30461.

**Special Conservation** Fortification. Unmodified forest, *Thismia rodwayi*.

Values:

Earth Data: Dissected rolling ring plain, yellow/brown soils.

Flora: Mixed podocarp-broadleaved species forest, kanuka-manuka scrub,

broadleaved species forest, mown grass.

Fauna: Most common forest birds. Blue duck on adjoining Wanganui River.

Fishery Values: Low (trout).

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

**Historic Resources:** New Zealand land wars. Te Kooti fortification. Rifle pits at roadend. Possibly

most important historical site within conservancy.

Site Numbers Present: 6370, 6372

**Recreation:** Walking high. Backcountry drive-in 100%.

**Facilities:** Access road, car park, walking tracks, viewing platforms, on-site interpretation.

**Animal Pests:** Possums, red deer in low numbers, mustelids.

Plant Pests: Broom (Cytisus scoparius), heather (Calluna vulgaris), gorse. Refer

Tongariro/Taupo Problem Plant Strategy.

**Fences:** Not applicable.

Access: Off State Highway 47.

Concessions: Various guiding permits.

Other Issues: Liaise with Historic Places Trust over removal of public shelter. Consult with

tangata whenua over management decisions. Cannabis cultivation. Not

included in 1080 operation.

Management Priority: Prepare conservation plan. Protect earthworks. Improve interpretation

displays. Upgrade track to upper redoubt.

Management Work Done: Site and track maintenance, road maintenance, plant pest control. Work done

on upper and lower viewing platforms to improve safety. Removal of Wanganui stream bridge. Took over management of adjacent NIWA bridge

1999.

Last Update: April 2000

Bibliography: Wilson, O., War in the tussock: Te Kooti and the battle at Te Porere,

Government Printer, Wellington, 1961

Value: Historic: 1 Conservation: 2 Recreation: 1

Site Name: Omori Conservation Unit No.: 60145

Status: Conservation Area

Area (ha):1.0000File Reference:RES 030Area Office:Turangi/TaupoMap Reference:T18 493 520

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

**Legal Description:** Part Pukawa 3A Block , Block

III, Puketi Survey District.

Special Conservation Nil

Values:

Earth Data: Pumice alluvium.

Flora: Broadleaved species forest, regenerating bracken fernland, introduced grasses.

Fauna: Most common forest birds.

Fishery Values: Nil

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Unknown
Site Numbers Present: 6394, 6395

**Recreation:** Nil. Urban fringe natural remnant 100%.

Facilities: Nil

**Animal Pests:** Possums, mustelids, common urban pests.

Plant Pests: Blackberry grazed by trespassing stock. Refer Tongariro/Taupo Problem

Plant Strategy.

**Fences:** Fenced outside boundary. Monitor for future use.

Access: Adjacent Omori Road.

Concessions: Nil

Other Issues: Stock trespass.

Management Priority: Keep stock out to facilitate site regeneration.

Management Work Done: Public nuisance wasps nest destroyed.

Last Update: April 2000 Bibliography: Unknown

Value: Historic:	3	Conservation:	3	Recreation:	2
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Site Name: Thames Street Conservation Unit No.: 60146

Status: Conservation Area

 Area (ha):
 0.0265
 File Reference:
 ACC 008

 Area Office:
 Ruapehu
 Map Reference:
 \$20 178 977

Place: Tongariro-Ruapehu Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Tongariro

Legal Description: Crown land in Block I, Karioi

Survey District SO16459.

Special Conservation Nil

Values:

Earth Data: Artificial railway embankment.

Flora: Grass, native amenity planting.

Fauna: Not applicable.

Fishery Values: Nil

Tangata Whenua Issues: Information held in the domain of Ngati Rangi.

**Historic Resources:** Disused dog strip.

Site Numbers Present: Nil

**Recreation:** Urban 100%.

Facilities: Nil

Animal Pests: Not applicable.

Plant Pests: Broom (Cytisus scoparius), lupin (Lupinus). Refer Tongariro/Taupo Problem

Plant Strategy.

Fences: Not applicable.

Access: Adjacent Thames Street, Ohakune.

Concessions: Nil

Bibliography:

Other Issues: Land has very little conservation value.

Unknown

Management Priority: Assess for disposal.

Management Work Done: Primary survey.

Last Update: April 2000

Value: Historic: 3 Conservation: 3 Recreation: 3

Site Name: Mangateitei Road Conservation Unit No.: 60147

Status: Conservation Area

 Area (ha):
 0.2428
 File Reference:
 RES 026

 Area Office:
 Ruapehu
 Map Reference:
 \$20 215 940

Place: Tongariro-Ruapehu Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Tongariro

Legal Description: Section 89, Block V, Karioi

Survey District.

Special Conservation Nil

Values:

Earth Data: Flood plain, ring plain.
Flora: Introduced grasses.

Fauna: Nil Fishery Values: Nil

Tangata Whenua Issues: Information held in the domain of Ngati Rangi.

**Historic Resources:** Disused dog dosing strip.

Site Numbers Present: Nil

**Recreation:** Rural 100%.

Facilities: Nil
Animal Pests: Nil

Plant Pests: Broom (Cytisus scoparius), barberry (Berberis). Refer Tongariro/Taupo Problem

Plant Strategy.

Fences: Nil

Access: Adjacent Mangateitei Road.

Concessions: Nil
Other Issues: Nil

Management Priority: Manage as part of Rangataua Scenic Reserve. Change status.

Management Work Done: Plant pest spraying.

Last Update: April 2000 Bibliography: Unknown

Value: Historic: 3 Conservation: 3 Recreation: 3

Site Name: Town of Erua Conservation Unit No.: 60148

Status: Conservation Area

 Area (ha):
 12.4835
 File Reference:
 RES 066

 Area Office:
 Ruapehu
 Map Reference:
 \$20 170 170

Place: Plateau Forests Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Tongariro

**Legal Description:** Sections 5, 6, 7, 8, 9, 10, 11,

12, 13, 14, 15 and 16, Block III, sections 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 and 21, Block IV and sections 1 and 2, Block V, Town of

Erua.

**Special Conservation** 

Values:

Unknown

**Earth Data:** Flat wetland, pumice alluvium.

Flora: Unknown Fauna: Fernbird.

Fishery Values: Nil

Tangata Whenua Issues: Information held in the domain of Ngati Rangi and Ngati Tuwharetoa.

Historic Resources: Unknown

Site Numbers Present: Nil

**Recreation:** Rural 100%.

Facilities: Nil

**Animal Pests:** Possums, mustelids.

Plant Pests: Heather (Calluna vulgaris), Pinus contorta, broom (Cytisus scoparius). Refer

Tongariro/Taupo Problem Plant Strategy.

Fences: Not applicable.

Access: Adjacent Erua Road and State Highway 47.

Concessions: Nil
Other Issues: Nil

Management Priority: Manage as part of Erua Forest.

Management Work Done: Currently managed as part of Erua Forest.

Last Update: April 2000
Bibliography: Unknown

Value:	Historic:	3	Conservation:	2	Recreation:	3	

Site Name: Highway 47 Conservation Unit No.: 60149

Status: Conservation Area

Area (ha):12.4609File Reference:TON 002Area Office:RuapehuMap Reference:S19 190 220

Place: Tongariro-Ruapehu Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Tongariro

Legal Description: Stopped Road in Block XVI, Kaitieke Survey District,

blocks X, XI, XIII and XIV, Tongariro Survey District and

Block I, Ruapehu Survey District.

**Special Conservation** Buffer zone.

Values:

Earth Data: Ring plain.

Flora: Flax-toetoe tussockland.

Fauna: Most common forest birds, fernbird.

Fishery Values: Nil

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Nil
Site Numbers Present: Nil

**Recreation:** Nil. Backcountry drive-in 100%. Walking low.

Facilities: Disused substation metal pits, quarry, metal dump, old road.

Animal Pests: Possums, hares, stock trespass, bees, mustelids.

Plant Pests: Broom (Cytisus scoparius), heather (Calluna vulgaris), Pinus contorta. Refer

Tongariro/Taupo Problem Plant Strategy.

**Fences:** Some fencing.

Access: Adjacent State Highway 47.

Concessions: Nil

Other Issues: Visual barrier and scenic link between Tongariro National Park/Landcorp

Raurimu.

Management Priority: Maintain fences. Control plant pests. Manage as part of Hauhungatahi.

Management Work Done: Plant pest control.

Last Update: April 2000
Bibliography: Unknown

Value: Historic: 3 Conservation: 2 Recreation: 3

Site Name: Makaranui Conservation Unit No.: 60150

Status: Gravel Reserve

Area (ha):0.4157File Reference:RES 078Area Office:RuapehuMap Reference:\$20 120 955

Place: Tongariro-Ruapehu Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Tongariro

Legal Description: Part Section XI, Block 8,

Makotuku Survey District.

Special Conservation Nil

Values:

Earth Data: Ring plain/sedimentary.

Flora: Grass.

Fauna: Farm stock.

Fishery Values: Nil

Tangata Whenua Issues: Knowledge held in the domain of Ngati Rangi.

Historic Resources: Nil
Site Numbers Present: Nil

**Recreation:** Walking low. Rural 100%.

Facilities: Nil

Animal Pests: Common urban pests.

Plant Pests: Common urban plant pests. Refer Tongariro/Taupo Problem Plant Strategy.

**Fences:** Fully fenced but not on boundary.

Access: Adjacent State Highway 49.

Concessions: Nil
Other Issues: Nil

Management Priority: Assess for disposal/lease.

Management Work Done: Primary inspection.

Last Update: April 2000
Bibliography: Unknown

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Value:	Historic:	3	Conservation:	3	Recreation:	3	l

Site Name: Whangamata Stream Conservation Unit No.: 60151

Status: Scenic Reserve

 Area (ha):
 30.6220
 File Reference:
 RES 017

 Area Office:
 Turangi/Taupo
 Map Reference:
 T17 650 802

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

Legal Description: Lots 1, 2 and 3, DPS 38472

and lots 4 and 5, DPS 38473.

Special Conservation Protection of spawning stream. Important corridor of regenerating native

Values: vegetation.

Earth Data: Shallow stream valley, pumice alluvium, yellow/brown pumice soils.

Flora: Carex-Juncus sedge rushland, native plantings, exotic plantings, pasture.

Fauna: Some common forest birds. Blue heron, waterfowl on water edges.

Fishery Values: Internationally significant fishery spawning stream. High shoreline angling

values.

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Nil
Site Numbers Present: 6415

Recreation: Walking low, picnicking low, swimming low, fishing high. Urban fringe

natural remnant 50%. Rural natural remnant 50%.

Facilities: Nil

**Animal Pests:** Possums – bovine Tb endemic, limited stock trespass, hares, cats, mustelids.

Plant Pests: Monkey musk (Mimulus), gorse, willow, broom (Cytisus scoparius), heather

(Calluna vulgaris), brier rose (Rosa micrantha), blackberry. Refer

Tongariro/Taupo Problem Plant Strategy.

Fences: Well fenced.

Access: Adjacent Whangamata Road, adjacent Kinloch Road, lake access.

Concessions: Nil

Other Issues: Poaching of trout. Potential impact of urban development. Illegal access,

dumping of plant pests from urban areas.

Management Priority: Control monkey musk (Minulus). Maintain reserve boundary. Plant valley

with native species, public walking track, rabbits (animal control/plant pest control). Goal native forested reserve. Protect spawning stream. Fencing of

right of way boundary.

Management Work Done: Education, compliance, extensive revegetation planting since 1987. Fencing.

Monkey musk (*Mimulus*) control. Thinning and pruning of exotic trees. Goat control to zero density. Possum control by Waikato Regional Council. Last 1080 operation winter 1994. Fencing of right of way boundary. Ground trapping possum control 1991 (ongoing). Fire control 1999. Fencing control

1999.

Last Update: April 2000 Bibliography: Unknown

Site Name: Conway Street Conservation Unit No.: 60152

Status: Conservation Area

Area (ha):0.3817File Reference:RES 078Area Office:RuapehuMap Reference:\$20 166 960

Place: Tongariro-Ruapehu Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Tongariro

**Legal Description:** Lots 13, 14 and 15, DP 15558

and Lot 3, DP 46907.

**Special Conservation** Buffer zone.

Values:

Earth Data: Ring plain, riverbank.

Flora: Mown grass.

**Fauna:** Forest birds, urban birds.

Fishery Values: Trout, eels, koura.

Tangata Whenua Issues: Information held in the domain of Ngati Rangi.

Historic Resources: Nil
Site Numbers Present: Nil

**Recreation:** Nil. Urban 100%.

**Facilities:** DOC house (staff accommodation).

Animal Pests: Common urban pests, mustelids.

Plant Pests: Blackberry, willow, broom (Cytisus scoparius). Refer Tongariro/Taupo Problem

Plant Strategy.

**Fences:** Fully fenced.

Access: Arawa Street, Conway Road.

Concessions: Nil

Other Issues: Surplus to department requirements, to be assessed for disposal.

Management Priority: Assess for disposal.

Management Work Done: Not applicable.

Last Update: April 2000

Bibliography: Unknown

Value:

Whakaroa Point Site Name: Conservation Unit No.: 60153 Status: Recreation Reserve 355,6983 Area (ha): File Reference: **RES 075** Area Office: Turangi/Taupo Map Reference: T18 640 760 Place: Taupo Basin Management Plan: No **Local Authority:** Taupo District Council **Ecological District:** Taupo Lots 1 and 2, DPS 27304. Legal Description: Soil and water protection values. Scenic backdrop to Lake Taupo. Woodrose **Special Conservation** Values: (Dactylanthus taylori), ongaonga, kowhai, ngaio. Earth Data: Headland, rhyolite bluffs, undulating dome surface, yellow/brown pumice soils and loams. Flora: Fivefinger-kohuhu forest, bracken fernland, kamahi forest, kowhai-kanuka forest. Fauna: Most common forest birds. NZ falcon, seasonal use by kereru. Black-backed gull roosts/nests on bluffs. Range of waterfowl along lakeshore. Fishery Values: Lakeshore trout fishing moderate. Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa. **Historic Resources:** Terraces, quarry/shelter. Site Numbers Present: Nil Recreation: Hunting low. Backcountry drive-in 100%. **Facilities:** Nil **Animal Pests:** Possums - bovine Tb endemic, low numbers of red deer, goats since 1988 in very low numbers, pigs (seasonal), mustelids. **Plant Pests:** Gorse, broom (Cytisus scoparius), pines, crack willow. Refer Tongariro/Taupo Problem Plant Strategy. Fences: Well fenced along farm boundaries. Access: Adjacent Kinloch Village. Boat access. **Concessions:** Easement Taupo District Council water supply plant. Other Issues: Potential for Lake Taupo Walkway through area. Management Priority: Goat control. Investigate appropriateness of reserve status. consistent with 60044. Remove wilding pines. Control possums. Protection of water quality. Management Work Done: Goat control since 1988. Waikato Regional Council involved in bovine Tb possum control. Last aerial 1080 operation September 1994. Fencing completed since 1988. Aerial goat survey. Wilding pine removal 1994. Western Lake Reserves comprehensive plant species list 1999. Last Update: April 2000 Unknown Bibliography:

**Historic:** 

Conservation:

Recreation:

3

Site Name: Moturoa Conservation Unit No.: 60154

Status: Conservation Area

Area (ha): 12.3454 File Reference: RES 066

Area Office: Ruapehu Map Reference: S19 175 200

Place: Plateau Forests Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Tongariro

Legal Description: Sections 1 and 7, Block IV,

Manganui Survey District.

**Special Conservation** Unknown

Values:

Earth Data: Ring plain, yellow/brown pumice soils.

Flora: Kamahi forest, kaikawaka-Hall's totara forest.

Fauna: Most common forest birds, kereru, kaka, robin, kakariki, rifleman.

Fishery Values: Nil

Tangata Whenua Issues: Information held in the domain of Ngati Rangi.

Historic Resources: Unknown

Site Numbers Present: Nil

**Recreation:** Backcountry drive-in 100%. Walking low, hunting low. Lake access by boat.

Facilities: Nil

Animal Pests: Possums, low numbers of red deer, pigs (seasonal).

Plant Pests: Pinus contorta, broom (Cytisus scoparius). Refer Tongariro/Taupo Problem Plant

Strategy.

Fences: Exotic (southern and west) fenced and north side, i.e. prison, also fenced.

Access: From State Highway 4 and across Landcorp land.

Concessions: Nil

Other Issues: Area under land claim. Kamahi die-back.

Management Priority: Protect biodiversity. Maintain status quo. Manage as part of Tongariro

National Park.

Management Work Done: Woodrose (Dactylanthus taylori) caging and annual monitoring.

Last Update: April 2000
Bibliography: Unknown

Site Name: Whakapapa River Conservation Unit No.: 60155

Status: Marginal Strip

 Area (ha):
 99.6840
 File Reference:
 RES 074

 Area Office:
 Ruapehu
 Map Reference:
 \$19 173 392

Place: Plateau Forests Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Taumarunui

Legal Description: Crown land reserve from sale

in blocks IV and VIII,

Kaitieke Survey District.

**Special Conservation** Ecologically part of Tongariro Conservation Area. Cliff vegetation. Blue duck

Values: population.

Earth Data: Steep river gorge, Waimarino lahars, Jurassic sediments, composite

yellow/brown pumice soils, podzolized in places.

Flora: Mixed podocarp forest, flax-sedge cliff-face vegetation.

Fauna: Most common forest birds. Blue duck population decreasing towards

Owhango. NZ falcon.

Fishery Values: Significant trout fishery and habitat over entire Whakapapa River. Significant

indigenous fish populations.

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa and the Whanganui

tribes.

**Historic Resources:** Mill site at northern end.

Site Numbers Present: Nil

**Recreation:** Rafting low, kayaking low, fishing moderate, camping low. Backcountry drive-

in 100%.

Facilities: Nil

Animal Pests: Possums - bovine Tb endemic, goats common.

Plant Pests: Broom (Cytisus scoparius), blackberry, gorse, lupin (Lupinus), Pinus contorta. Refer

Tongariro/Taupo Problem Plant Strategy.

**Fences:** Farm boundaries partially fenced.

Access: Over private land from State Highway 4. Adjacent Ohinetonga Road.

Concessions: No concession held for water supply intake (Ruapehu District Council).

Other Issues: Upstream hydro facilities regulate water flow. Minimum flow issue.

Management Priority: Control goats. Regeneration of riparian vegetation. Reinstate and maintain

fences. Ensure compliance by RDC on easement issues.

Management Work Done: Ongoing possum control by Manawatu-Wanganui Regional Council. Last

aerial 1080 operation winter 1996. Goat control by the department. Fencing

maintenance.

Last Update: April 2000 Bibliography: Unknown

Site Name: Te Pure Stream Conservation Unit No.: 60156

Status: Marginal Strip

Area (ha): 0.8000 File Reference: FOP 011

Area Office: Ruapehu Map Reference: S19 160 290

Place: Plateau Forests Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Tongariro

**Legal Description:** Crown land reserve from sale in Block XII, Kaitieke Survey

District.

Special Conservation

Values:

Unknown

Earth Data: Riverside feature, Waimarino lahar.

Flora: Manuka, cut-over forest, fuchsia trees.

Fauna: Most common forest birds, NZ falcon, long-tailed cuckoo.

Fishery Values: Unknown

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa and the Whanganui

tribes.

**Historic Resources:** Old mill site (1950s).

Site Numbers Present: Nil

**Recreation:** Nil. Backcountry drive-in 100%.

Facilities: Nil

**Animal Pests:** Possums - bovine Tb endemic, goats, hares.

Plant Pests: Blackberry, Pinus contorta, broom (Cytisus scoparius). Refer Tongariro/Taupo

Problem Plant Strategy.

**Fences:** One poor condition fence. **Access:** Requires landowner consent.

Concessions: Nil
Other Issues: Nil

Management Priority: Control goats. Full general survey required. Control Pinus contorta.

Management Work Done: Possum control by Manawatu-Wanganui Regional Council. Last 1080

operation winter 1991. Goat control by the department. Treat and manage as

part of Tongariro Forest.

Last Update: April 2000 Bibliography: Unknown

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Value:	Historic:	3	Conservation:	3	Recreation:	1	ı

Site Name: Makotuku River Conservation Unit No.: 60157

Status: Marginal Strip

Area (ha):18.7000File Reference:RES 078Area Office:RuapehuMap Reference:\$20 135 032

Place: Plateau Forests Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Tongariro

Legal Description: Crown land reserve from sale

in Block XVI, Manganui

Survey District.

Special Conservation Unknown

Values:

Earth Data: Gorge, ring plain.

Flora: Broadleaved species forest, mixed podocarp forest (remnant).

Fauna: Most common forest birds. Cuckoo occasionally.

Fishery Values: Trout, eels.

**Tangata Whenua Issues:** Information held in the domain of the Ngati Rangi tribe.

Historic Resources: Nil
Site Numbers Present: Nil

**Recreation:** Fishing low, eeling low. Rural natural remnant 100%.

Facilities: Nil

**Animal Pests:** Possums, mustelids, cats, rats, rabbits.

Plant Pests: Barberry (Berberis), blackberry. Refer Tongariro/Taupo Problem Plant

Strategy.

**Fences:** Partially fenced along some boundaries.

Access: Over private land or via Matapuna Rd. and old coach route.

Concessions: Nil
Other Issues: Nil

Management Priority: Fence for riparian protection.

Management Work Done: Ongoing barberry (Berberis) control. Ongoing possum control regional council.

Last Update: April 2000
Bibliography: Unknown

Site Name: Mangateitei Stream Conservation Unit No.: 60158

Status: Marginal Strip

Area (ha):2.0000File Reference:RES 078Area Office:RuapehuMap Reference:\$20 178 954

Place: Tongariro-Ruapehu Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Tongariro

Legal Description: Crown land reserve from sale

in Block V, Karioi Survey

District.

**Special Conservation** Unknown

Values:

Earth Data:Riverbank, ring plain.Flora:Exotic plantings, pasture.Fauna:Common pasture birds.

Fishery Values: Trout, eels.

Tangata Whenua Issues: Information held in the domain of the Ngati Rangi.

Historic Resources: Nil
Site Numbers Present: Nil

Recreation: Urban 100%.

Facilities: Nil

Animal Pests: Possums, mustelids.

Plant Pests: Pinus contorta, willow, barberry (Berberis), macrocarpa (Cupressus macrocarpa), Pinus

radiata. Refer Tongariro/Taupo Problem Plant Strategy.

**Fences:** Fully fenced, cattle-proof.

Access: From State Highway 4 over private land. In stream for Ruapehu Road.

Concessions: Nil

Other Issues: Mature exotics cover site.

Management Priority: Assess for restoration.

Management Work Done:

Last Update: April 2000
Bibliography: Unknown

Site Name: Atiamuri Conservation Unit No.: 60159

Status: Marginal Strip

Area (ha):0.2000File Reference:RES 043Area Office:Turangi/TaupoMap Reference:T17 684 047

Place: Taupo Basin Management Plan: No

Local Authority: Taupo District Council Ecological District: Atiamuri

Legal Description: Crown land reserve from sale

in Block IX, Atiamuri Survey

District.

**Special Conservation** Atiamuri has regional geopreservation significance.

Values:

**Earth Data:** Gently sloping pumice area, yellow/brown pumice soils.

Flora: Mixed broadleaved forest.

**Fauna:** Seasonal use by most common forest birds.

**Fishery Values:** Limited river fishing.

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa and Ngati Tahu.

Historic Resources: Unknown

Site Numbers Present: Nil

Recreation: Rural 100%.

**Facilities:** Some unformed tracks.

**Animal Pests:** Possums - bovine Tb endemic, mustelids.

Plant Pests: Broom (Cytisus scoparius). Refer Tongariro/Taupo Problem Plant Strategy.

Fences: Nil

Access: Adjacent State Highway 30.

Concessions: Nil

Other Issues: Unknown

Management Priority: Full general survey required.

Management Work Done: Nil

Last Update: April 2000

Bibliography: Vucentich, C.G., Soils of the Atiamuri District, Central North Island., Dept of

Lands and Survey, Wellington, 1978

Site Name: Poutu River Conservation Unit No.: 60160

Status: Marginal Strip

Area (ha):17.3000File Reference:RES 048Area Office:Turangi/TaupoMap Reference:T19 532 340

Place: Tongariro-Ruapehu Management Plan: No

Local Authority: Taupo District Council Ecological District: Tongariro

Legal Description: Crown land reserve from sale

in blocks IV, VII and VIII,

Pihanga Survey District.

Special Conservation Blue duck on river. Poutu tephra section has national geopreservation

Values: significance.

Earth Data: Steep river terrace, true left, andesite, yellow/brown pumice soils.

Flora: Broadleaved species forest, kanuka forest.

Fauna: Most common forest birds. Blue duck recorded on Poutu River.

Fishery Values: High. Significant spawning stream. Low to moderate trout fishery.

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Nil
Site Numbers Present: Nil

**Recreation:** Fishing moderate, rafting low. Rural natural remnant 100%.

Facilities: Bridge across river.

**Animal Pests:** Possums - bovine Tb endemic, mustelids.

Plant Pests: Broom (Cytisus scoparius). Refer Tongariro/Taupo Problem Plant Strategy.

Fences: Nil

Access: Adjacent State Highway 1 over private land.

Concessions: Nil
Other Issues: Nil

Management Priority: Regeneration and maintenance of riparian vegetation.

Management Work Done: Ongoing possum control by Waikato Regional Council. Last aerial 1080

operation in June 1998. Study on trout spawning as part of Taupo District

Council consents procedures.

Last Update: April 2000
Bibliography: Unknown

Site Name: Te Anoputarua Point Conservation Unit No.: 60161

Status: Marginal Strip

Area (ha): 3.1363 File Reference: RES 048

Area Office: Turangi/Taupo Map Reference: T19 576 485

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

**Legal Description:** Section 10, Block VII, Puketi

Survey District.

**Special Conservation** Small stand of black beech.

Values:

Earth Data: Lakeshore beach ridge, cliffs, rhyolite bluff, pumice alluvium, some organic

soils, yellow/brown pumice soils.

Flora: Raupo swamp grading into flax swamp with scattered sedge, cabbage tree,

Baumea; manuka shrubland with kanuka, wilding pines, willow, mingi mingi,

mixed broadleaved forest.

**Fauna:** Numerous waterfowl along lake edge.

**Fishery Values:** Moderate to low.

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

Historic Resources: Unknown

Site Numbers Present: Nil

**Recreation:** Gamebird hunting. Rural natural remnant 100%.

Facilities: Nil

Animal Pests: Possums, mustelids, rabbits.

Plant Pests: Willows, gorse. Refer Tongariro/Taupo Problem Plant Strategy.

**Fences:** Not applicable. **Access:** Boat access.

Concessions: Nil

Other Issues: Illegal vehicle access.

Manage ment Priority: Manage as part of 60037. Investigate for re-gazettal with 60037.

Management Work Done: Goat control 1996. Pussy willow, crack willow poison trial 1992/1993.

Last Update: April 2000
Bibliography: Unknown

Value:

Site Name: Tongariro River Conservation Unit No.: 60162 Status: Marginal Strip 2.4000 File Reference: **RES 046** Area (ha): Area Office: Turangi/Taupo Map Reference: T19 533 438 Place: Taupo Basin Management Plan: No Local Authority: Taupo District Council **Ecological District:** Taupo Legal Description: Crown land reserve from sale in Block X, Puketi Survey District. **Special Conservation** Buffer zone for river. Values: Earth Data: River terrace, pumice alluvium. Flora: Kanuka forest, broadleaved species forest. Fauna: Waterfowl. Fishery Values: High. Angling access. Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa. **Historic Resources:** Historically popular fishing site. Site Numbers Present: 8104 Recreation: Fishing high, walking low, mountain biking low. Rural natural remnant 100%. **Facilities:** Walking tracks (angler access). **Animal Pests:** Possums - bovine Tb endemic, mustelids. **Plant Pests:** Crack willows. Refer Tongariro/Taupo Problem Plant Strategy. Fences: Access: Hirangi Road via private land or Crescent Reserve. **Concessions:** Nil Other Issues: Nil Management Priority: Maintenance and enhancement of riparian vegetation. Management Work Done: Possum control by Waikato Regional Council. Trapping only each winter since 1992. Animal Health Board funded aerial 1080 possum control August 1998. Last Update: April 2000 Bibliography: Unknown

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**Historic:** 

Conservation:

Pag	e 525
Tongariro/Taupo Conservation Management Str	ategy

3

Recreation:

2002 - 2012

2

Site Name: Shaw Reach Conservation Unit No.: 60163

Status: Marginal Strip

Area (ha):1.5000File Reference:RES 046Area Office:Turangi/TaupoMap Reference:T19 535 439

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

Legal Description: Crown land reserve from sale

in Block X, Puketi Survey

District.

**Special Conservation** River protection/buffer zone.

Values:

**Earth Data:** River terrace, pumice alluvium.

Flora: Kanuka forest, broadleaved species forest.

Fauna: Waterfowl.

Fishery Values: High. Angling access.

**Tangata Whenua Issues:** Information held in the domain of Ngati Tuwharetoa.

**Historic Resources:** Historically popular angling spot.

Site Numbers Present: Nil

**Recreation:** Fishing high, walking low, mountain biking low. Rural natural remnant 100%.

**Facilities:** Walking tracks (angler access).

Animal Pests: Possums - bovine Tb endemic, cattle access to Tongariro River, mustelids,

grazing for horses.

Plant Pests: Crack willows. Refer Tongariro/Taupo Problem Plant Strategy.

Fences: Adjoining farm boundary fenced.

Access: Over private land via Grace Road.

**Concessions:** Illegal grazing of horses.

Other Issues: Current possum control work by regional council is ineffective for Tb control,

toxic poisoning is the preferred alternative but this coflicts with high public

use and proximity to residential areas.

Management Priority: Maintenance and enhancement of riparian vegetation.

Management Work Done: Possum control by Waikato Regional Council. Trapping only each winter

since 1992.

Last Update: April 2000 Bibliography: Unknown

Site Name: Waikato River Conservation Unit No.: 60164

**Status:** Marginal Strip

Area (ha): 20.7900 File Reference: LAN 025

Area Office: Turangi/Taupo Map Reference: U17 866 828

Place: Taupo Basin Management Plan: No

Local Authority: Taupo District Council Ecological District: Atiamuri

Legal Description: Part Section 4, Block XI,

Tatua Survey District.

**Special Conservation** River protection.

Values:

Earth Data: River terrace, pumice deposits and alluvium, yellow/brown pumice soils.

Flora: Limited botanical/conservation value.

Fauna: Seasonal use by common forest birds.

**Fishery Values:** Moderate river access for fishing. Low angling values. Moderate trout fishery.

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa and Ngati Tahu.

Historic Resources: Track route.

Site Numbers Present: Nil

**Recreation:** Fishing low, kayaking high. Rural natural 100%.

Facilities: Nil

Animal Pests: Possums, mustelids.

Plant Pests: Regenerating pines, blackberry. Refer Tongariro/Taupo Problem Plant

Strategy.

Fences: Fence in poor state. May not be on boundary.

Access: From river or Aratiatia Road marginal strip.

Concessions: Nil

Other Issues: Illegally logged. Remove planted pines.

Management Priority: Revegetate, fence reconstruction, possum contol (trapping).

Management Work Done: Removal of pines.

Last Update: April 2000 Bibliography: Unknown

Site Name: Mangawhero River Conservation Unit No.: 60165

Status: Marginal Strip

Area (ha):1.4000File Reference:RES 078Area Office:RuapehuMap Reference:\$20 128 963

Place: Tongariro-Ruapehu Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Tongariro

Legal Description: Crown land reserve from sale

in Block VIII, Makotuku

Survey District

**Special Conservation** Buffer zone.

Values:

Earth Data: Riverbank feature.

Flora: Black beech forest, manuka scrub, pasture.

Fauna: Domestic stock.

**Fishery Values:** Trout fishery, moderate angling values, eels present.

Tangata Whenua Issues: Information held in the domain Ngati Rangi.

Historic Resources: Nil
Site Numbers Present: Nil

**Recreation:** Fishing low. Rural natural remnant 100%.

Facilities: Some unformed tracks.

Animal Pests: Possums, rabbits, mustelids.

Plant Pests: Willows, gorse, blackberry. Refer Tongariro/Taupo Problem Plant Strategy.

Fences: Unfenced

Access: Adjacent Mangawera Road.

Concessions: Nil

Other Issues: Currently grazed without licence.

Management Priority: Assess for restoration requirements.

Management Work Done: Some plant pest pulling.

Last Update: April 2000 Bibliography: Unknown

Site Name: Aratiatia Rapids Conservation Unit No.: 60166 Status: Recreation Reserve File Reference: Area (ha): 53.8400 **RES 002** Area Office: Turangi/Taupo Map Reference: U17 847 837 Place: Taupo Basin Management Plan: Yes Local Authority: Taupo District Council **Ecological District:** Atiamuri Legal Description: Section 1, SO 59408, Block XI, Tatua Survey District. **Special Conservation** Unknown Values: Earth Data: River terrace. Flora: Broadleaved species forest, exotic plantings, native plantings, pasture. Fauna: Most common forest birds, NZ falcon, pheasant, quail. Waterfowl along river. Fishery Values: Fishery access from river bank. Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa and Ngati Tahu. **Historic Resources:** Nil Site Numbers Present: 6426 Recreation: Kayaking high. Rural natural remnant 50%. Rural 50%. **Facilities:** Equestrian facilities. Signs, access road. Rapid Jet ticket office/service unit, toilets, jetty, jetty access, signage, landscaping. **Animal Pests:** Rabbits, hares, possums. **Plant Pests:** Pines, lupin (Lupinus), broom (Cytisus scoparius), gorse, Himalayan honeysuckle (Leycesteria formosa). Refer Tongariro/Taupo Problem Plant Strategy. Fences: Completely fenced. Access: Adjacent Rapids Road. **Concessions:** TT/027/STR - Rapids Jet, TT/015/LAN - Kiwi River Safaris, TT178/EAS -Tauhara North No. 2 Trust and seasonal beehive permit Other Issues: Illegal housetruck camping. Dumping of car bodies. Management Priority: Monitor concessions. Management Work Done: Planted 12 000 native plants 1993. Planted 20 hectares of Douglas fir (Pseudotsuga menziesii). Road upgraded. Possum trapping and ground control measures by Waikato Regional Council. Fencing renewal. Last Update: April 2000 Bibliography: Dept of Lands and Survey, Review of land holdings: Tauhara, Huka, Aratiatia and Wairakei blocks., Dept of Lands and Survey, Hamilton, 1982 **Historic:** 3 Conservation: 3 Recreation: 2 Value:

2002 - 2012

Site Name: Ohakune Domain Conservation Unit No.: 60167 Recreation Reserve Status: Area (ha): 6.3156 File Reference: **RES 078** Area Office: Ruapehu Map Reference: S20 165 954 Place: Tongariro-Ruapehu Management Plan: No Local Authority: Ruapehu District Council **Ecological District:** Tongariro Legal Description: Section 54 and Part Section 36, Block VII, Makotuku Survey District. **Special Conservation** Unknown Values: Earth Data: Unknown Flora: Unknown Fauna: Unknown Fishery Values: Unknown Tangata Whenua Issues: Information held in the domain of Ngati Rangi. Historic Resources: Unknown Site Numbers Present: Nil Recreation: Unknown **Facilities:** Nil **Animal Pests:** Unknown **Plant Pests:** Unknown Fences: Unknown Access: Unknown **Concessions:** Nil Other Issues: Controlled and managed by Ruapehu District Council (Gazette 1920, page 2647) Management Priority: Full site inspection needed. Management Work Done: Unknown Last Update: January 2001 Bibliography: Unknown

Value:	Historic:	Conservation:	Recreation:	

Site Name: Owhango Domain Conservation Unit No.: 60168

Status: Recreation Reserve

Area (ha): 6.5329 File Reference:

Area Office: Ruapehu Map Reference: S19 156 426

Place: Plateau Forest Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Taumarunui

**Legal Description:** Section 59, X, Hunua Survey

District.

Nil

Special Conservation

Values:

Earth Data: Flat/rolling landform.

Flora: Mown grass surrounded by natives (podocarp forest boundary).

**Fauna:** Seasonal use by common forest birds.

Fishery Values: Nil

Tangata Whenua Issues: Information held in the domain of Ngati Rangi.

**Historic Resources:** Ancient sports facilities - 1920s archery.

Site Numbers Present: Nil

**Recreation:** Sporting activities, walking etc..

Facilities: Toilets, sporting facilities, archery range, sports fields.

**Animal Pests:** Cats, rats, dogs, mustelids.

Plant Pests: Gorse, blackberry. Refer Tongariro/Taupo Problem Plant Strategy.

Fences: Not applicable.

Access: O'Donnells Road.

Concessions: Nil

Other Issues: Ruapehu District Council appointed to control and manage. Ongoing

consultation with district.

Management Priority: Ruapehu District Council

Management Work Done: Ruapehu District Council

Last Update: April 2000
Bibliography: Unknown

Site Name: Jubilee Park Conservation Unit No.: 60169

Status: Scenic Reserve

Area (ha):12.0142File Reference:RES 078Area Office:RuapehuMap Reference:\$20 164 957

Place: Tongariro-Ruapehu Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Tongariro

**Legal Description:** Suburban Section 40, suburban Section 33, part sections 34

and 42, Block VIII, Makotuku Survey Block.

Special Conservation

Values:

Nil

Earth Data: Part of Tongariro ring plain.

Flora: Mixed podocarp-broadleaved forest with black beech.

**Fauna:** All common forest bird species.

Fishery Values: Trout, eels, koura.

Tangata Whenua Issues: Information held in the domain of the Ngati Rangi tribe.

Historic Resources: Nil
Site Numbers Present: Nil

**Recreation:** Picnicking high, walking high, bird watching, mountain biking moderate.

Scenic urban 100%.

Facilities: Walking track.

Animal Pests: Possums, mustelids, rats, cats.

Plant Pests: Broom (Cytisus scoparius), blackberry, cotoneaster, old man's beard. Refer

Tongariro/Taupo Problem Plant Strategy.

**Fences:** Fenced off adjacent farmland - good condition.

Access: Burns Street, State Highway 49.

Concessions: Nil

Other Issues: Ruapehu District Council appointed to control and manage. Amalgamated

with Ohakune Domain Recreation Reserve. Investigate boundary

rationalisation with adjoining landowner.

Management Priority: Currently managed and administered by Ruapehu District Council as

recreation reserve. The department to use for conservation theme area.

Management Work Done: Conservation Week tree planting with local school children since 1995.

Last Update: April 2000
Bibliography: Unknown

Site Name: Owhango Hall Conservation Unit No.: 60170 Status: Recreation Reserve 0.1012 File Reference: Nil Area (ha): Area Office: Ruapehu Map Reference: S19 165 425 Place: Plateau Forest Management Plan: No Local Authority: Ruapehu District Council **Ecological District:** Taumarunui Legal Description: Section 17, Block I, Town of Owhango, Kaitieke Survey District, SO 15771 **Special Conservation** Nil Values: Earth Data: Flat highly modified urban site. Flora: Amenity planting (large rhododendrons), mown grass. Nil Fauna: Fishery Values: Nil Tangata Whenua Issues: Unknown Historic Resources: Nil Site Numbers Present: Nil Recreation: Urban 100%. **Facilities:** Owhango Hall. **Animal Pests:** Nil

**Plant Pests:** Nil

Fences: Fenced on northern and eastern sides only. Adjacent to SH 4 and Ohorere Street. Access:

**Concessions:** Nil

Other Issues: Controlled and managed by Ruapehu Distric Council (1967 Gazette, p. 1930).

Nil Management Priority:

Management Work Done: Planted front of hall. Last Update: September 2000 Bibliography: Unknown

Site Name: Burnand Road Conservation Unit No.: 60171

Status: Marginal Strip

Area (ha): 1.1200 File Reference: Nil

Area Office: Turangi/Taupo Map Reference: \$18 138 539

Place: Plateau Forest Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Taumarunui

Legal Description: Block III, Piopiotea Survey

District, adjacent to Lots 1

and 3, DPS 79030.

**Special Conservation** Kowahi (*Sophoro microphylla*), totara, ribbonwood. Catchment protection.

Values:

Earth Data: Papa cliff, steep slope adjacent to Whanganui River.

Flora: Totara and kowhai forest (largely secondary), ribbonwood.

Fauna: Most common forest birds, seasonal use by tui.

Fishery Values: High

Tangata Whenua Issues: Unknown
Historic Resources: Unknown

Site Numbers Present: Nil

Recreation: Angling

Facilities: Nil

**Animal Pests:** Domestic stock, bovine Tb endemic.

Plant Pests: Buddleia, barberry (Berberis), shining privet, Japanese honeysuckle (Lonicera

japonica), blackberry.

**Fences:** At top of the cliff only.

**Access:** Through private farm land or across river.

Concessions: Nil

Other Issues: Illegal timber milling.

Management Priority: Fencing to exclude stock.

Management Work Done: Tb possum control by Horizons Manawatu/Wanganui, species list and

vegetation description in January 2000.

Last Update: September 2000

Bibliography: Unknown

Site Name: Kakahi Conservation Unit No.: 60172 Status: Marginal Strip Area (ha): 0.8550 File Reference: **RES 051** Area Office: Turangi / Taupo Map Reference: S18 156 503 Place: Plateau Forest Management Plan: No Local Authority: Ruapehu District Council **Ecological District:** Taumarunui Legal Description: Block VII, Piopiotea Survey District, adjacent to Lots 1 and 2, DPS 46072. **Special Conservation** Catchment protection. Values: Earth Data: Unknown Flora: Unknown Unknown Fauna: Fishery Values: High Unknown Tangata Whenua Issues: Historic Resources: Unknown Site Numbers Present: Nil Recreation: Angling **Facilities:** Nil **Animal Pests:** Unknown **Plant Pests:** Unknown Fences: Unknown Access: Unknown **Concessions:** Nil Other Issues: Unknown Management Priority: Full site inspection to record species list, vegetation description and identify management issues. Management Work Done: Nil Last Update: September 2000 Bibliography: Unknown Value: Historic: **Conservation:** Recreation:

Site Name: Mangawhero River No. 2 Conservation Unit No.: 60173 Status: Marginal Strip 0.2370 File Reference: **RES 078** Area (ha): Area Office: Ruapehu Map Reference: S20 112 952 Place: Tongariro-Ruapehu Management Plan: No Local Authority: Ruapehu District Council **Ecological District:** Tongariro Legal Description: Section 39, SO 32631, Block Makotuku VII, Survey District. **Special Conservation** Unknown Values: Earth Data: Unknown Flora: Unknown Unknown Fauna: Unknown Fishery Values: Tangata Whenua Issues: Unknown Historic Resources: Unknown Site Numbers Present: Unknown Recreation: Unknown **Facilities:** Unknown **Animal Pests:** Unknown **Plant Pests:** Unknown Fences: Unknown Unknown Access: **Concessions:** Nil Other Issues: Stopped railway land, gazetted in 1969. Management Priority: Full site inspection to record species list, vegetation description and identify management issues. Management Work Done: Unknown Last Update: September 2000 Bibliography: Unknown Value: Historic: **Conservation:** Recreation:

Site Name: Hatepe Conservation Unit No.: 60175

Status: Recreation Reserve – amalgamated with Conservation Unit 60089

Site Name: Raurimu Library Conservation Unit No.: 60176

Status: Local Purpose Reserve

Area (ha): 0.676 File Reference: Nil

Area Office: Ruapehu Map Reference: S19 170 288

Place: Plateau Forest Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Tongariro

Legal Description: Lot 1, DP 5419, Block XII,

Kaitieke Survey District.

Special Conservation Nil

Values:

Earth Data: Flat rural section.

Flora: Manuka, mown grass.

Fauna: Nil
Fishery Values: Nil

Tangata Whenua Issues: Unknown

Historic Resources: Nil
Site Numbers Present: Nil
Recreation: Nil

Facilities: Nil
Animal Pests: Nil

Plant Pests: Encroaching blackberry.

Fences: Fenced on three sides.

Access: Pito Street.

Concessions: Nil

Other Issues: Public Library created under Section 17 of the Land Laws Amendment Act

1920, which sets reserves apart under the provisions of the Public Reserves

and Domains Act 1908 and vests it in the Crown.

Grazed by horses.

Management Priority: Nil

Management Work Done: Nil

Last Update: September 2000
Bibliography: Unknown

Tawera Street Site Name: Conservation Unit No.: 60177

Status: Gravel Reserve

Area (ha): 0.2024 File Reference: LES 040 Area Office: Turangi/Taupo Map Reference: T19 497 467

Taupo Basin Place: Management Plan: No **Local Authority:** Taupo District Council **Ecological District:** Taupo

Legal Description: Sections 18 and 20, Block II,

Tokaanu township, SO 20976

**Special Conservation** 

Values:

Nil

Earth Data: Flat. Pumice alluvium.

Flora: Native and exotic plantings. Mown grass. Fauna: Most common forest birds (occasionally).

Fishery Values: Nil

Tangata Whenua Issues: Information held in the domain of Ngati Tuwharetoa.

**Historic Resources:** Part of old Tokaanu Fire Station.

Site Numbers Present: Nil

Social club activities. Recreation:

Facilities: Tokaanu Social Club building.

**Animal Pests:** Not applicable. **Plant Pests:** Not applicable.

Fences: Nil

Access: State Highway 41.

**Concessions:** TT/041/STR – Tokaanu Social Club.

Other Issues: Tokaanu Fire Station also straddles Crown Land (Section 4, SO 36340)

Management Priority: Monitor concession. Investigate for disposal/rationalisation with adjacent

Crown land.

Management Work Done: Nil

Last Update: September 2000 Bibliography: Unknown

Site Name: Manganuioteao Conservation Unit No.: 60178

Status: Scenic Reserve

 Area (ha):
 54.6325
 File Reference:
 FOP 001

 Area Office:
 Ruapehu
 Map Reference:
 \$20 081 115

Place: Plateau Forest Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Matemateonga

Legal Description: Section 24, Block XI,

Manganui Survey District.

**Special Conservation** Rata-podocarp and rata-tawa forest. Kiwi, blue duck.

Values:

Earth Data: Ridges and valleys in Miocene sandstone, yellow/brown loams podzolized in

places.

Flora: Partly logged remnant of podocarp, tawa and rata.

Fauna: Most common forest birds. Kaka, kiwi, blue duck, long-tailed bats.

Fishery Values: Trout in Manganuioteao. Conservation order over Manganuioteao. Common

indigenous fish present. Headwaters of nationally important trout fishery.

**Tangata Whenua Issues:** Information held in the domain of the Whanganui tribes.

Historic Resources: Unknown

Site Numbers Present: Nil

**Recreation:** Hunting low. Backcountry walk-in 100%.

Facilities: Nil

Animal Pests: Possums, goats, rats, mustelids, red deer, loose stock.

Plant Pests: Broom (Cytisus scoparius), heather (Calluna vulgaris). Refer Tongariro/Taupo

Problem Plant Strategy.

Fences: Partly

Access: Backcountry walk-in only.

Concessions: Nil
Other Issues: Nil

Management Priority: Managed as part of Mangamingi Ecological Area (60097/6).

**Management Work Done:** Refer conservation unit 60097/6.

Last Update: September 2000

Bibliography: Unknown

Site Name: Ohinetonga Conservation Unit No.: 60179

Status: Marginal Strip

Area (ha):1.0370File Reference:RES 067Area Office:RuapehuMap Reference:\$19 175 440

Place: Plateau Forest Management Plan: No

Local Authority: Ruapehu District Council Ecological District: Taumarunui

Legal Description: Block X, Hunua Survey

District, SO 24495, adjoining

Section 64, Block X.

Special Conservation Catchment protection. Remnant stands of black beech forest (unusual in this

Values: area).

Earth Data: River terrace.

Flora: Mixed podocarp-broadleaved species, podocarp-tawa species. Some black

beech forest.

Fauna: Most common forest birds. Seasonal use by kereru and kaka.

Fishery Values: High trout fishery values. Significant common fresh water fish.

**Tangata Whenua Issues:** Information held in the domain of Whanganui tribes.

Historic Resources: Nil
Site Numbers Present: Nil

**Recreation:** Rafting, trout fishing.

Facilities: Nil

Animal Pests: Possums.

Plant Pests: Blackberry, willow.

Fences: Nil

Access: Via Whakapapa River.

Concessions: Nil
Other Issues: Nil

Management Priority: Pest control.

Management Work Done: Possum control by Horizons Manawatu/Wanganui.

Last Update: September 2000

Bibliography: Unknown

Site Name: Waitahanui River Mouth Conservation Unit No.: 60180

Status: Conservation Area

**Area (ha):** 7.576 **File Reference:** RES 061

Area Office: Turangi/Taupo Map Reference: U18 641 773

Place:Taupo BasinManagement Plan:NoLocal Authority:Taupo District CouncilEcological District:Taupo

**Legal Description:** Sections 1, 5, 6, 8 and 9, SO

61431.

**Special Conservation** Public access to Waitahanui River and Lake Taupo.

Values:

Earth Data: Flat lakeshore.

Flora: Nil
Fauna: Nil
Fishery Values: High

Tangata Whenua Issues: Land ownership issue and Treaty of Waitangi claim.

**Historic Resources:** Memorial seat to O.S. Hintz.

Site Numbers Present: Nil

**Recreation:** Angling high.

Facilities: Car park, sign.

Animal Pests: Nil
Plant Pests: Nil
Fences: Nil

Access: Adjacent to SH 1.

Concessions: Nil

Other Issues: Maintained by Taupo District Council.

Management Priority: Decision to be made on future management options.

Management Work Done: Car park gazetted 2000 as conservation area.

Last Update: September 2000

Bibliography: Unknown

# Part V

Appendices



# Appendices

Appendix 1	Tongariro National Park Management Plan
Appendix 2	Kaimanawa Forest Park Management Plan
Appendix 3	Threatened Fauna Priorities as per National Priority List
Appendix 4	Threatened Flora Priorities as per National Priority List
Appendix 5	Roads and Tracks in Tongariro Forest (Track Schedule)
Appendix 6	Management Planning
Appendix 7	Aircraft Landing Sites in Tongariro/Taupo Conservancy
Appendix 8	Land Inventory Index (alphabetical order)



# Appendix 1 Tongariro National Park Management Plan

# Appendix 2 Kaimanawa Forest Park Management Plan

#### Threatened Fauna Priorities as per National Priority List

Common Name	Species	Threatened Category	Places Present (or recorded)	
D' 1				
Birds				
Australasian bittern	Bataurus poiciloptilus	О	Taupo Basin	
Banded dotterel	Charadrius bicinctus bicinctus	С	Kaimanawa-Moawhango/ Tongariro-Ruapehu	
Blue duck	Hymendaimus melacorhyncus			
Caspian tern	Hydroprogne caspia	О	Taupo Basin	
Kereru	Hemiphaga novaeseelandiae	В	All	
New Zealand falcon	Falco novaeseelandiae	В	All	
New Zealand dabchick	Podiceps rufopectus	С	Taupo Basin	
North Island brown kiwi	Apteryx australis mantelli	А	All	
North Island kaka	Nestor meridionallis septentrionalis	В	All	
Royal spoonbill	Platalea regia	О	Taupo Basin	
White heron	Egretta alba	О	Taupo Basin	
Yellow crowned parakeet	Cyanoramphus auriceps	С	Not in Taupo Basin	
Fish				
Koaro	Galaxias brevipinnis	С	All	
Invertebrates				
	Powelliphanta marchanti	С	Kaimanawa-Moawhango	
Mammals				
Long-tailed bat	Chalinolobus tuberculata	В	All	
Short-tailed bat	Mystacina tuberculata rhyacobia	A	All	
Reptiles				
Small-scaled skink	Leiolopisma microlepis	A	Kaimanawa-Moawhango/ Taupo Basin	

#### **Category Description:**

A Highest priority

B Second highest priority

C Third highest priority

O Species threatened in New Zealand (known to be secure outside New Zealand)

## Threatened Flora Priorities as per National Priority List

Common Name	Species	Threatened Category	Places Present (or recorded)
Ferns			
rems			ш р :
	Cyclosorus interruptus	О	Taupo Basin
Orchids			
Swamp leek orchid	Prasophyllum aff. patens	В	Tongariro-Ruapehu
Tutukiwi/swamp greenhood	Pterostylis micromega	A	Tongariro-Ruapehu
Other Species			
	Carex uncifolia	В	Tongariro-Ruapehu
	Deschampsia caespitosa	С	Kaimanawa-Moawhango
	Frullania suiblana	В	Unknown
	Gratiola nana	О	Taupo Basin
	Ranunculus ternatifolius	О	Plateau Forests
Trees and Shrubs			
	Coprosma wallii	С	Plateau Forests
	Melicytus flexuosus	С	Plateau Forests
	Pimelia tomentosa	С	Taupo Basin
Turner's kohuhu/tentpole tree	Pittosporum turneri	В	Plateau Forests Taupo Basin
Parasitic Plants			
	Korthalsella salicornioides	О	Tongariro-Ruapehu
Red mistletoe	Peraxilla tetrapetala	В	Tongariro-Ruapehu
Scarlet mistletoe	Peraxilla colensoi	В	Kaimanawa-Moawhango
Tupeia	Tupeia antarctica	В	Taupo Basin
Woodrose	Dactylanthus taylori	A	All
Yellow flowered mistletoe	Alepis flavida	В	Tongariro-Ruapehu

#### **Category Description:**

A Highest priority

B Second highest priority

C Third highest priority

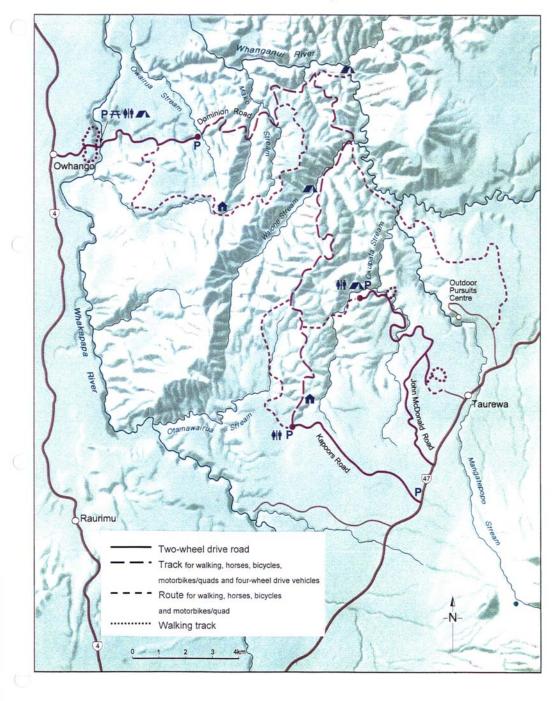
O Species threatened in New Zealand (known to be secure outside New Zealand)

## Roads and Tracks in Tongariro Forest (Track Schedule)

- Turangi/Taupo Area: Tongariro Walkway, Taupahi Reserve Walk, Tree Trunk Gorge Track, Tukino Mountain Road, Huka-Aratiatia Walkway, Kawakawa Bay Track.
- Ruapehu Area: 42 Traverse, Pony Club Track, Top Track, Waterline Track, Clymos Track, Kapoors Road, John McDonald Road, Slab Road, Boggy Track, Cokers Track, Paramarawera Track, Waiakaki Track, Erua Pylon Tracks, Cuffs Road.



## Roads and tracks in Tongariro Forest





#### Management Planning

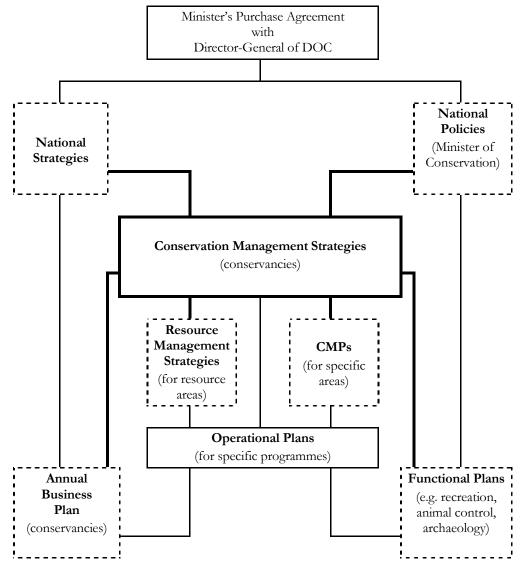


Figure 1



#### Aircraft Landing Sites in Tongariro/Taupo Conservancy

The following sites are the only sites where aircraft may land within the Tongariro/Taupo Conservancy:

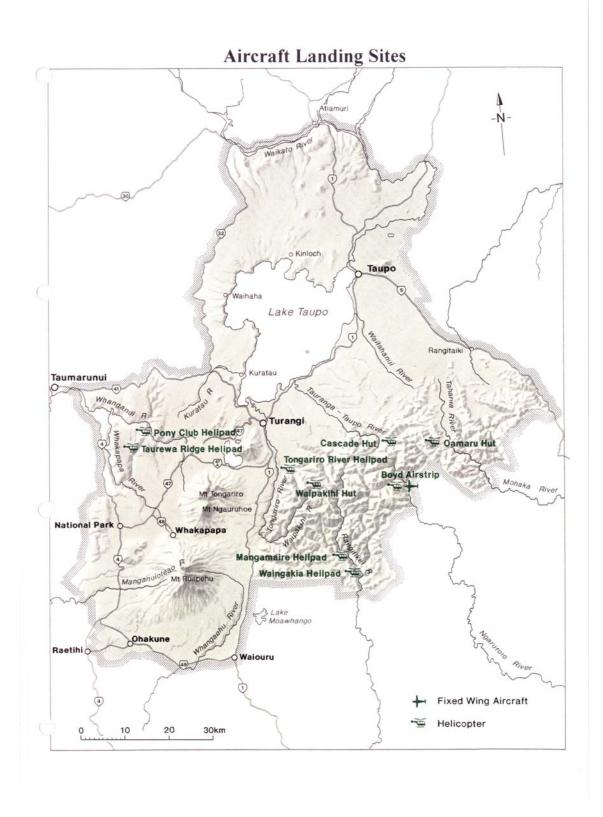
#### Kaimanawa Forest Park

- Boyd Airstrip
- Oamaru Hut helipad
- Waipakihi Hut helipad
- Cascade Hut helipad
- Waingakia Helipad
- Waiotaka Helipad \*
- Tiraki Stream Helipad\*
- Pox Clearing helipad\*
- Thunderbolt Tops\*
- Mangamaire Helipad\*\*
- These helipads have restricted access and are available on a booking only basis. Interest parties should contact the Department of Conservation (07) 386 8607.
- \*\* The Mangamaire helipad is administered by the NZ Defence Force; parties wishing to use this site must be approved. Contact can be made through Operations Division, Waiouru. A number of helicopter operators have this approved status.

#### **Tongariro Forest**

- Sir Edmund Hilary Outdoor Pursuits Centre
- Whanganui River\*
- Whakapapa River\*
- These sites require a permit from the Department of Conservation for each landing. The Department of Conservation will determine the specific landing site and give approval based on public use and environmental impacts. Contact Ruapehu Area Office, Whakapapa, (07) 892 3729.







# Land Inventory Index (alphabetical order)

Austinia Canagaria a Aust	(0049
Aratiatia Conservation Area	60048
Aratiatia Rapids Recreation Reserve	60166
Aratiatia Rapids Scenic Reserve	60127
Atiamuri Marginal Strip	60159
Awaroa Recreation Reserve	60084
Broadlands Road Scenic Reserve	60140
Burnand Road Marginal Strip	60171
Canyon Limestone Country Conservation Area	60042/4
Central Kaimanawa Forest Park	60051/8
Conway Street Conservation Area	60152
Crown Park Recreation Reserve	60055
Delta Recreation Reserve	60090
Dominion Milled Forest Conservation Area	60042/6A
Ecology Stream Ecological Area	60051/5
Erua Conservation Area	60097
Erua Ecological Area	60097/4
Erua Exotic Forest Conservation Area	60097/5
Erua North Milled Forest Conservation Area	60097/1
Erua Recreation Reserve	60124
Erua South Milled Forest Conservation Area	60097/7
Five Mile Bay Recreation Reserve	60137
Forest blocks and pasture covenants Conservation Area	60042/9
Gardiners Scenic Reserve	60095
Graces Road Conservation Area	60117
Hatepe Recreation Reserve	60089
Hatepe Recreation Reserve (amalgamated with 60089)	60175
Hauhungatahi Wilderness Area National Park	60011/7
Highway 47 Conservation Area	60149
Highway 47A Conservation Area	60116
Hinemaiaia Scenic Reserve	60071
Hingarae Scenic Reserve	60062
Horopito West Scenic Reserve	60014
Hospital Conservation Area	60008
Huka Falls (Left Bank) Crown Land, administered by the department	60141
Huka Falls Scenic Reserve	60077
Hukapapa Conservation Area	60001
Hura Scenic Reserve	60098
Jubilee Park Scenic Reserve	60169
Kaahu Scenic Reserve	60078
Kaiapo Bay Scenic Reserve	60073
Kaimanawa Forest Park	60051
Kakahi Marginal Strip	60172
Kawakawa Bay Conservation Area	60053
Kawakawa Bay Scenic Reserve	60057
Kiokio Conservation Area	60010
Kopokonui Stream Scenic Reserve	60104
Kotukutuku Stream Scenic Reserve	60061
Lake Rotokawa Conservation Area	60049
Landcorp Pasture Conservation Area	60042/10

Makaranui Conservation Area	60126
Makaranui Gravel Reserve	60150
Makatote Scenic Reserve	60123
Makotuku River Marginal Strip	60157
Manga Te Puhi Scenic Reserve	60017
Mangaehuehu Scenic Reserve	60016
Mangakowhiriwhiri Stream Conservation Area	60134
Mangamingi Ecological Area	60097/6
Mangamingi Stream Conservation Area	60025
Mangamutu Conservation Area	60027
Manganuioteao Conservation Area	60004
Manganuioteao Scenic Reserve	60178
Mangateitei Road Conservation Area	60147
Mangateitei Stream Marginal Strip	60158
Mangawhero Lowland Forest National Park	60011/10
	60165
Mangawhero River Marginal Strip  Mangawhero River No. 2 Marginal Strip	60173
	60102
Manowharangi Bay Recreation Reserve  Matapuna Road Conservation Area	60003
Mine Bay Scenic Reserve (leasehold)	60138
Mission Bay Recreation Reserve	00-00
Morunga Scenic Reserve	60096
Motuoapa Bay Recreation Reserve	60122
Motuoapa Scenic Reserve	60067
Moturoa Conservation Area	60154
Motutere Scenic Reserve	60069
National Park Sections Conservation Area	60136
National Park Wetland Conservation Area	60097/2
National Trout Centre	60142
Ngatamariki Hot Springs Scenic Reserve	60079
Northern Kaimanawa Forest Park	60051/3
Ohakune Domain Recreation Reserve	60167
Ohakune Field Centre Conservation Area	60007
Ohakune Lakes Scenic Reserve	60125
Ohakune National Park	60011/8
Ohinetonga Marginal Strip	60179
Ohinetonga Scenic Reserve	60022
Okaia Stream Scenic Reserve	60105
Okama Stream Marginal Strip	60040
Okupata Conservation Area	60042/3
Okupata Milled Forest Conservation Area	60042/6B
Omori Conservation Area	60145
Omori Recreation Reserve	60093
Omori Scenic Reserve	60094
Opawa Bush Scientific Reserve	60076
Opepe Bush Scenic and Historic Reserve	60074
Opoto Scenic Reserve	60080
Oruatua Conservation Area	60046
Oruatua Recreation Reserve	60101
Otaketake Stream Scenic Reserve	60058
Otamangakau Wetlands Conservation Area	60024
Otamarautara Stream Scenic Reserve	60106
Otamawairua Conservation Area	60042/2
Owhango Domain Recreation Reserve	60168

Owhango Hall Recreation Reserve	60170
Pakuri Scenic Reserve	60047
Paurini Scenic Reserve	60033
Pihanga Block National Park	60011/1
Pihanga Scenic Reserve	60107
Pine Forest/ Rayonier Crown Lease Conservation Area	60042/11
Piopiotea Conservation Area	60042/7
Pokaka Scenic Reserve	60013
Pokuru Road Conservation Area	60133
Poutu River Marginal Strip	60160
Pukepoto Ecological Area.	60129
Rangataua Conservation Area	60085
Rangataua No.2 Conservation Area	60020
Rangataua Scenic Reserve	60015
Rangatira Point Scenic Reserve (leasehold)	60072
Rangipo National Park	60011/4
Rangitaiki Conservation Area	60070
Rangitikei Forest Park	60051/7
Rangitukua Scenic Reserve	60066
Raurimu Library Local Purpose Reserve	60176
Raurimu Scenic Reserve	60018
Raurimu Spiral Scenic Reserve	60023
Recreational Hunting Area Forest Park	60051/1
Rotomoho Stream Conservation Area	60028
Ruapehu Pristine Alpine Zone National Park	60011/5
Runanga Armed Constabulary Historic Reserve	60128
Shaw Reach Conservation Area	60109
Shaw Reach Marginal Strip	60163
Skifield/Village Areas National Park	60011/6
Southern Access Corridor Forest Park	60051/9
Spa Road Local Purpose Reserve	60111
Stump Bay Conservation Area	60029
Stump Bay Recreation Reserve	60036
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## Glossary of Terms

Advocacy The collective term for work done to promote conservation to

the public and outside agencies by the Department of Conservation, 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 sport fish and game management plans, 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 either was associated with human

activity that occurred before 1890 or is the site of the wreck of a vessel where that wreck occurred before 1900, and which does or may be able to, through investigation by archaeological methods,

provide evidence relating to the history of New Zealand.

(Historic Places Act 1993)

**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)

CMS Conservation Management Strategy

Coastal environment An environment in which the coast is usually a significant part or

element. The extent of the coastal environment will vary from place to place depending on how much it affects or is directly affected by coastal processes and the management issues concerned. Includes at least three distinct but interrelated parts: the coastal marine area, the active coastal zone and the land

backdrop.

#### Coastal marine area

The area of foreshore and sea bed 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

A lease, easement, licence or permit granted to enable the carrying on of a trade, occupation or business on areas managed by the Department of Conservation.

(Conservation Act 1987)

#### Conservancy

The Department of Conservation has 14 conservancy offices. Each of these is responsible for a geographic region 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 up to 12 appointed members. Their functions include overseeing the preparation of the conservation management strategies and national park management plans for their areas, approval of conservation management plans (e.g., for forest parks), advising the New Zealand Conservation Authority or Director-General of the Department of Conservation on regional conservation matters and advising on new walkways.

(Conservation Act 1987)

# 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)

# 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 ten years.

(Conservation Act 1987)

#### 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 McGrechan decision in Air New Zealand -v- Wellington International Airport - CP403/91, 6 January 1992)

Department, the; DOC

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.

(New Zealand 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.

(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.

(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. Ecosystems range in size from small freshwater ponds to earth itself.

**Effect** 

Includes any positive or adverse effect, any temporary or permanent effect, any past, present or future effect, any cumulative effect arising over time in combination with other effects regardless of scale, intensity, duration or frequency, and also includes potential effects of high probability and potential effects of low probability but high potential impact.

(Resource Management Act 1991)

Endangered

A plant or animal in danger of extinction and whose survival is

unlikely if the causal 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)

**Environment Waikato** The regional council that extends over the Waikato region and

Taupo and within this area has primary responsibility for the management of water, soil, geothermal resources and pollution control and for regional aspects of hazard mitigation, soil

conservation and hazardous substances.

**Fauna** Animal life of a place or time.

(Collins Concise Dictionary)

**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)

**Foreshore** Shore between high- and low-water marks at mean spring tides.

(Conservation Act 1987)

Flora Plant life of a place or time.

(Collins Concise Dictionary)

**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 fresh water.

(Conservation Act 1987)

**Functional planning** Strategic assessment for a single function of the department over

a wide geographic area, e.g., wild animal control plans or

conservancy recreation strategies.

(Management Planning Guidelines, Department of Conservation)

General policy 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 1987, National Parks Act 1980, Reserves Act 1977, Wildlife Act 1953, Marine Reserves Act 1977, Wild Animal Control Act 1977, Marine Mammals Protection Act 1978 and/or the New Zealand Walkways Act 1990. Conservation management strategies are required to implement statements of general policy.

(Management Planning Guidelines, Department of Conservation)

#### Geopreservation

Sites and features needing protection because of their value to

earth science.

Habitat

The environment in which a particular species or group of species lives. Includes the physical and biotic characteristics that are relevant to the species concerned, e.g., the habitat of the blue duck consists of swift water with an abundance of freshwater insects.

Hapu

Subtribe.

(Waitangi Tribunal Report - Wai 27, 1991)

Historic area

An area of land that (a) contains an interrelated group of historic places, and (b) forms part of the historical and cultural heritage of New Zealand and (c) lies within the territorial limits of New Zealand.

(Historic Places Act 1993)

Historic place

Any land, (including an archaeological site) building or structure (or part of), and any combination of land and a building or structure that forms part of the historical and cultural heritage of New Zealand and is within the territorial limits of New Zealand. Includes anything fixed to this land.

(Historic Places Act 1993)

Historic resource

An historic place within the meaning of the Historic Places Act 1993. Includes any interest in an historic place.

(Historic Places Act 1993)

Historic values

An historic value is any combination of physical historic sites, cultural values held by the community and developed through time against a physical context or heritage values shared by the community.

**ICOMOS** 

International Commission on Monuments and Sites; this is the leading international organisation responsible for developing principles and processes for historic conservation. The ICOMOS New Zealand Charter was produced in 1993 to guide historic conservation in this country.

**IUCN** 

International Union for Conservation in Nature.

Implementation provisions

Specific statements on how objectives are to be achieved. These may include criteria for assessment.

(Management Planning Guidelines, Department of Conservation)

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)

Indigenous Refers to plants or animals which were established in New

Zealand before the arrival of human beings and includes species which are unique to New Zealand (endemic) as well as those

which are also found elsewhere in the world.

**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.

**Interpretation** Conveying information about the origin, meaning or values of

natural or cultural heritage via live, interactive or static media. Occurs in the vicinity of the subject and is designed to stimulate visitor interest, increase understanding and promote support for

conservation.

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 interrelationships and resilience (refer biodiversity.

Iwi Tribe, people.

(Waitangi Tribunal Report - Wai 27, 1991)

**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.

Kawenata Covenant.

Land administered by

the Department

All land held, managed or administered under the Conservation Act 1987 and other acts administered by the Department of

Conservation.

(refer first schedule of the Conservation Act 1987)

Lease A lease is a grant of an exclusive 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** A licence is either a profit à prendre (the right to take produce

from land and/or a grazing right) or other grant that gives a non-exclusive interest in land, or a grant that makes provision for any activity on the land that the licensee is permitted to carry out.

(Conservation Act 1987)

Mahinga kai, mahika
Places where food is procured or produced.
kai, mahinga mataitai

(Waitangi Tribunal Report - Wai 27, 1991)

Mana Authority, control, influence, prestige, power.

(Waitangi Tribunal Report - Wai 27, 1991)

Mana moana Customary rights and authority over water.

Mana whenua Customary rights and authority over land.

(Waitangi Tribunal Report - Wai 27, 1991)

Customary authority exercised by 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 Guides, Department of Conservation)

Marginal strip Land reserves from disposition by the Crown under the Land

Act 1948 and the Conservation Act 1987 along the foreshore, waterways greater than three metres wide (when not used by the Electricity Corporation of New Zealand for generating electricity) and lakes. This term also refers to land acquired in exchange for marginal strips. Marginal strips are 20 metres wide unless a reduction of width has been approved by the Minister.

(Conservation Act 1987)

Mauri Life principle, special character.

(The Revised Dictionary of Maori, PM Ryan)

Mining Means to take, win or extract by whatever means a mineral

existing in its natural state in land, or a chemical substance from that mineral, for the purpose of obtaining the mineral or chemical substance. Does not include prospecting or

exploration.

(Crown Minerals Act 1991)

Natural resources Includes plants and animals and their habitats, landscape and

landforms, geological features, and systems of interacting living

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Natural values organisms and their environment.

(Conservation Act 1987)

Nature conservation The preservation and protection of 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 6 of the Conservation Act 1987. Amongst other functions, it has the statutory responsibility for approving general policy, conservation management strategies, plans and national

park management plans.

(Conservation Act 1987)

**NGO** Non-Government organisation.

**Objectives** Statements of intended results. These can be broad or narrow in

scope and should be accompanied by implementation provisions.

(Management Planning Guidelines, Department of Conservation)

Pa Fortified village or, more recently, any village.

(Waitangi Tribunal Report - Wai 27, 1991)

**Permit** A written order giving permission to act, especially for entry into

a place. (Concise Oxford Dictionary)

A grant of rights to undertake an activity that does not require an

interest in land.

(Conservation Act 1987)

Podocarps A predominantly southern hemisphere family of coniferous

plants which include the kahikatea, totara, Halls totara, matai,

miro, rimu, tanekaha or celery pine and mountain pine.

**Prehistory** The time period prior to written history.

(Concise Oxford Dictionary)

**Preservation** In relation to resources under the Conservation Act 1987, means

the maintenance, as 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. Normally expressed as 'the weight of dry

matter/unit area/unit time (e.g., kilogram/hectare/year).'

Protected natural area A legally protected area, characterised by indigenous species or

ecosystems, where the main purpose of management is retention

of the indigenous state.

(New Zealand Protected Natural Areas Programme New Zealand Biological Resource Centre, Publication No.6)

# Protected natural areas (PNA programme

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 (RAPs).

#### Protection

In relation to resources under the Conservation Act 1987means their maintenance, as far as is practicable, in their current state but includes restoration/rehabilitation to some former state and augmentation, enhancement or expansion.

(Conservation Act 1987)

#### Public conservation land

All land held, managed or administered under the Conservation Act 1987 and other acts administered by the Department of Conservation.

(refer first schedule of the Conservation Act 1987)

#### Rahui

A restriction on access, prohibition.

(Waitangi Tribunal Report - Wai 27, 1991)

#### Rangatiratanga

Sovereignty, chieftainship, authority, and in the context of this strategy refers to the authority of the iwi with traditional territorial interest in this conservancy.

#### 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.

(New Zealand Natural Areas Programme, New Zealand Biological Resources Centre, Publication No.6)

# Recreation opportunity spectrum (ROS)

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.

# Recreation and tourism concessions

Have the predominant purposes of facilitating recreation or tourism use and enjoyment of natural and historic values by the operator's client and customers.

#### Regional councils

Locally elected councils which have primary responsibility for management of water, soil and 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 statements.

(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 1991. They provide the overall framework for achieving sustainable management in the region and are binding on regional and district plans.

(Resource Management Act 1991, 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/rehabilitation

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)

Riparian

Environment situated or inhabited on the bank of, or adjacent

to, a waterbody.

Rohe

Boundary, tribal region.

(Waitangi Tribunal Report - Wai 27, 1991)

Runanga

Assembly, council.

(Waitangi Tribunal Report - Wai 27, 1991)

Specially protected

Conservation parks, wilderness areas, ecological areas, sanctuary areas, watercourse areas as detailed in part IV of the

areas 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.

**Stewardship area** A conservation area that is *not* a marginal strip, watercourse,

conservation park, ecological area, sanctuary area or wilderness area, or land in which an interest is held under the Conservation

Act 1987 for one or more of these purposes.

(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) safeguarding the life-supporting capacity of air, water, soil, and ecosystems and (c) avoiding, remedying or mitigating any

adverse effects of activities on the environment.

(Resource Management Act 1991)

Taking In relation to plants this includes breaking, cutting, destroying or

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 local 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 rare, vulnerable, endangered and

indeterminate species.

**Tikanga Maori** Maori customary values and practices.

(Resource Management Act 1991)

Urupa Cemetery, burial ground.

(Waitangi Tribunal Report - Wai 27, 1991)

**Vulnerable** A plant or animal believed likely to move into the endangered

category in the near future if the causal 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 1990.

(New Zealand Walkways Act 1990)

Water conservation order Made to recognise and sustain those characteristics of a water

body which afford outstanding amenity or intrinsic values. Made by the Minister for the Environment on the recommendation of

a special tribunal and/or the planning tribunal.

(Resource Management Act 1991)

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.

(New Zealand Wetlands Management Policy 1986)

Whakapapa Ancestry.

Whanau Family.

(Waitangi Tribunal Report - Wai 27, 1991)

Wild animal Deer, chamois, thar, wallaby, 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.

(Wild Animal Control Act 1977)

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