

PAPAROA NATIONAL PARK management plan



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Management Plan

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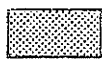
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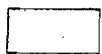


*Front Cover: Illustration by Chris Gaskin
Pancake Rocks Punakaiki*

CONSERVATION
TE PAPA ATAWHAI



Paparoa National Park



Other South Island National Parks

PAPAROA NATIONAL PARK



FIG 1
LOCALITY MAP

FOREWORD

This publication is the first management plan for Paparoa National Park. It has been prepared in accordance with the procedures set out in Section 47 of the National Parks Act 1980. Public notice of the intention to prepare the draft plan was given on 22 August 1988. The draft and a separate Resource Summary were advertised on 25 July 1990 and 24 submissions were received. Seven of these submissions were spoken to at a special hearings meeting of the department and the West Coast Conservation Board. All written and oral submissions have been given full consideration in the finalisation of this plan.

In submitting this plan for approval the West Coast Conservation Board has provided a summary of the comments received on the draft plan and a statement as to the extent to which they have or have not been accepted.

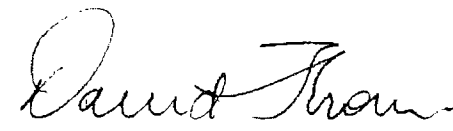
A management plan is an important tool for the overall management of a national park. In its draft form the plan provides the mechanism whereby the public and interested organisations can have a real input into park management.

In its final approved form the plan becomes, in effect, a "contract" between the West Coast Conservation Board, (on behalf of the public), the Department of Conservation and the Crown's treaty partner - Ngai Tahu.

It will be the basic day to day working document of the park managers, but will also provide a statement of intent for the long term direction in which the management of Paparoa National Park will proceed.

Therefore pursuant to the Act and having consulted the Minister of Conservation in terms of Section 48 of the Act the New Zealand Conservation Authority approves this plan.

Dated this 18th day of November 1992



David Thom
Chairperson
New Zealand Conservation Authority

TE TAIAO

A Ngai Tahu whakapapa recites the journey from Te Korekore (the personified ages of darkness) to the birth of the Sky Father and Earth Mother through to their descedants Ngai Tahu. The lineage of descent is from Te Po (The Night), Te Ao (The Day), Te Aomarama (The Bright Day), Te Auturoa (The Long-standing Day), Te Koretewhiwhia (The Unattainable Void), Te Koreterawea (The Intangible Void), Te Koretetamaua (The Unstable Void), Te Korematua (The Parentless), and finally to Te Maku (The Moisture) who coupled with Mahoranuiatea (The Distant Horizon) and Raki (The Sky Father) was born.

Raki had a number of wives one of whom was his beloved Papatuanuku (The Earth Mother). From his unions came the mountains, plants, animals and people and a host of atua (deities) to foster the well-being of his offspring.

Aoraki, the son of Raki, and his brothers left their home in the heavens, voyaging in a canoe, Te Waaka o Aoraki, to visit their stepmother Papatuanuku. They spent much time exploring the seas of the dark oceans until eventually they tired of this and wished to return to their father in the heavens.

Aoraki commenced the karakia which would lift the waaka free of the seas and take them home to the sky. However, he faltered in his recitation of the karakia and caused a break in the flow of words which would spell disaster for the endeavour.

Only the bow of the waaka had lifted into space, the rest of the vessel was still embedded in the dark oceans, and the separation faltered as the karakia failed causing the bow to crash back into the ocean and shatter. The canoe overturned causing Aoraki and his brothers to climb to the high side in order to save themselves. The cold storms from the south eventually froze them where they sat. The effect of the elements combined with the broken karakia was to turn all of the occupants and the canoe itself into stone. The bodies of Aoraki and his family became the mountains forming the chain we now call the Southern Alps. Aoraki is the highest mountain.

The heavenly realm intervened again and Tuterakiwhanoa, the son of Aoraki, came looking for his father and uncles who had never returned from their voyage. When he found them, Tuterakiwhanoa and his helpers performed energetic feats to transform the wreck of Te Waaka o Aoraki (the South Island) into a place which would be fitting for people to live in.

In this way all things are considered to have a mauri and to have a relationship with each other.

The whakapapa links Ngai Tahu to the atua and to all the descendants of Raki - the earth, waters, forests, and animals. This binds Ngai Tahu to the natural world and all life supported by it.

Papatuanuku is the mother of all these living things, all return to her at the time of their death, therefore Ngai Tahu belong to the land, not the land belonging to them. Hence the term tangata whenua.

Paparoa is an example of the works undertaken by the atua. They have created an extremely beautiful and bountiful place which people can enjoy and where they can cherish the whakapapa beginnings of Ngai Tahu and their relationship with Te Taiao - the universal cosmos.

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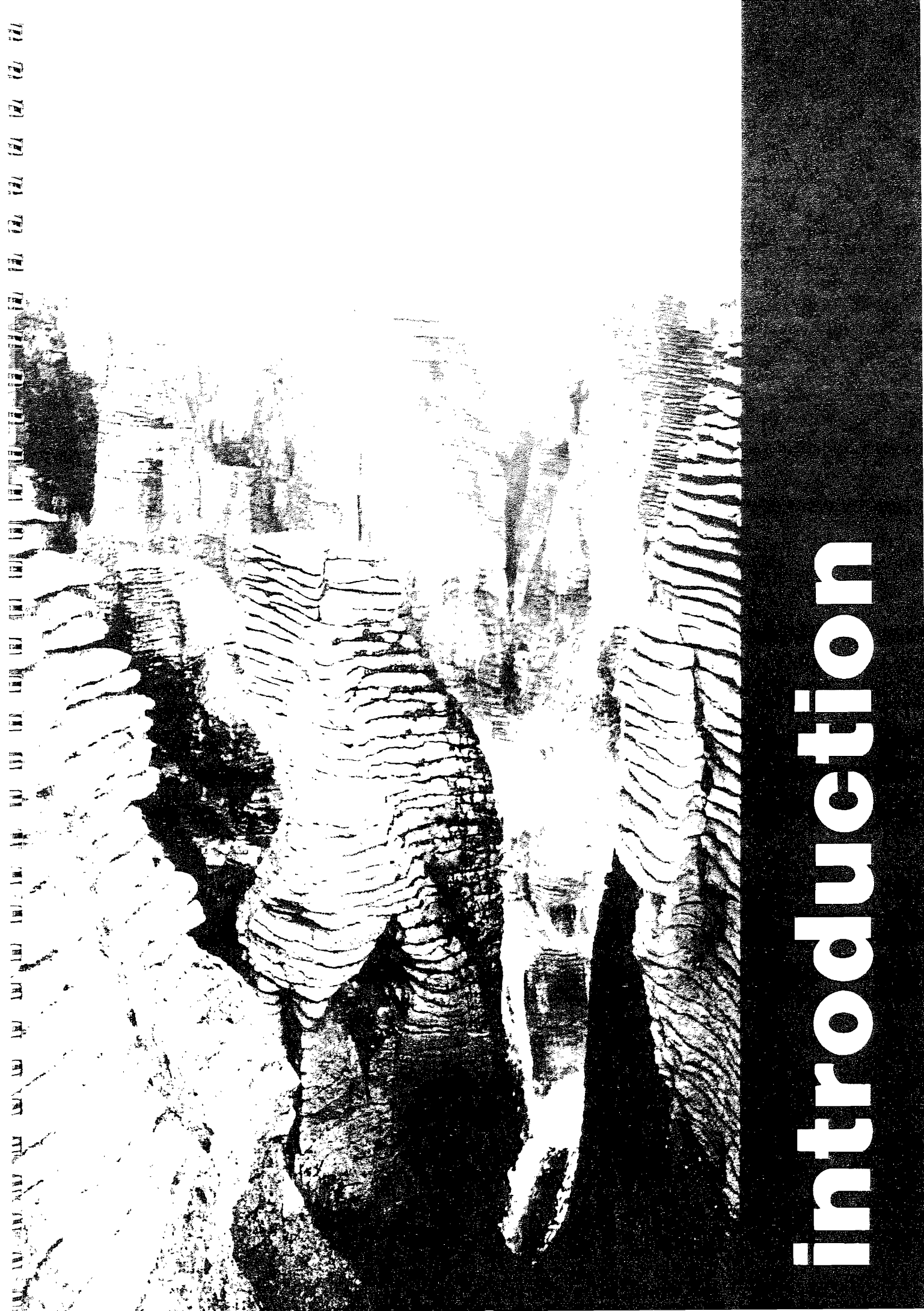
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introduction

1.1 INTRODUCTION

Paparoa National Park, an area of 30,327 ha, was gazetted on 23 November 1987 and declared open on 5 December 1987 in the national parks centennial year.

It lies in the northern West Coast region of the South Island (see Figure 1). The park consists of the catchments of four rivers, Punakaiki, Pororari, Bullock Creek and Fox, as well as the Ananui cave system and the southern side of the Tiropahi River Catchment. A detailed description of the park, and its physical, natural and cultural resources is included in the Paparoa National Park Resource Summary. This management plan contains only limited resource information. A full bibliography of the sources of this information forms part of the resource summary.

This management plan recognises the tino rangatiratanga of Ngai Tahu over its lands and waters in the concept of Te Taiao (the Maori concept of place within, and relationship to, the universal cosmos). The area now known as Paparoa National Park, is a small area in the total lands of Ngai Tahu, but this does not detract from its significance to the manawhenua of Ngai Tahu. A conscious effort has been made to weave and implement the concept of rangatiratanga and manawhenua through all sections and policies of this management plan.

This plan is a working tool for the future of the park only, but it has a place in the overall concept of partnership with the Crown's Treaty Partner - Ngai Tahu. Ngai Tahu will be variously represented in the implementation of this plan by their individual or collective hapu as tikanga dictates.

The centre for development of services is presently at Punakaiki, a small township close to the mouth of the Pororari River, about 47 kilometres from Greymouth and 56 kilometres from Westport. The township supports a small, but active and growing tourist industry and includes the Punakaiki Motor Camp and the department's Field Centre office.

Until the 1980s the New Zealand national park network consisted predominantly of mountainlands. During the past decade the balance has shifted somewhat with the protection of warmer, more fertile lowland ecosystems such as the South Okarito and Waikukupa Forest additions to Westland National Park and the new Paparoa National Park.

Paparoa National Park differs from the majority of national parks which traditionally have been created around a central feature of high relief. The converse is the case with Paparoa in that the central feature warranting protection is a low-lying forested basin - the complex Barrytown Syncline. The syncline lies parallel with the rest of the main Paparoa range and extends from the Punakaiki River to the Tiropahi River. Its influence has lead to the distinctive drainage pattern, soils and vegetation of the area as well as many cave systems.

Another feature which has implications for management is the unusual pattern of the visitor use. The focus of use of the park is on the peripheral coastal edge. In fact, much of what is publically perceived to be Paparoa National Park is actually land of different tenure which is often not administered by the department. The deficient representation in the park of coastal features creates problems for management, particularly in terms of recreation development for public use and holistic conservation management from mountains to sea.

The management of the park must also recognise that, although it is a discrete protected area, it is not an island. Cognisance is taken of the park's regional and national context, the effects of adjacent land use and the opportunities provided by other areas within the West Coast and beyond. Paparoa National Park should not attempt to be all things to all people. It is a new park and has considerable recreational potential in addition to an existing pattern of use. The essence of this management plan is to formulate a framework that enhances the beneficial aspects of current use and realises to an appropriate degree the area's potential, whilst protecting the intrinsic natural features that make the park identifiably Paparoa.

1.2 ADMINISTRATION

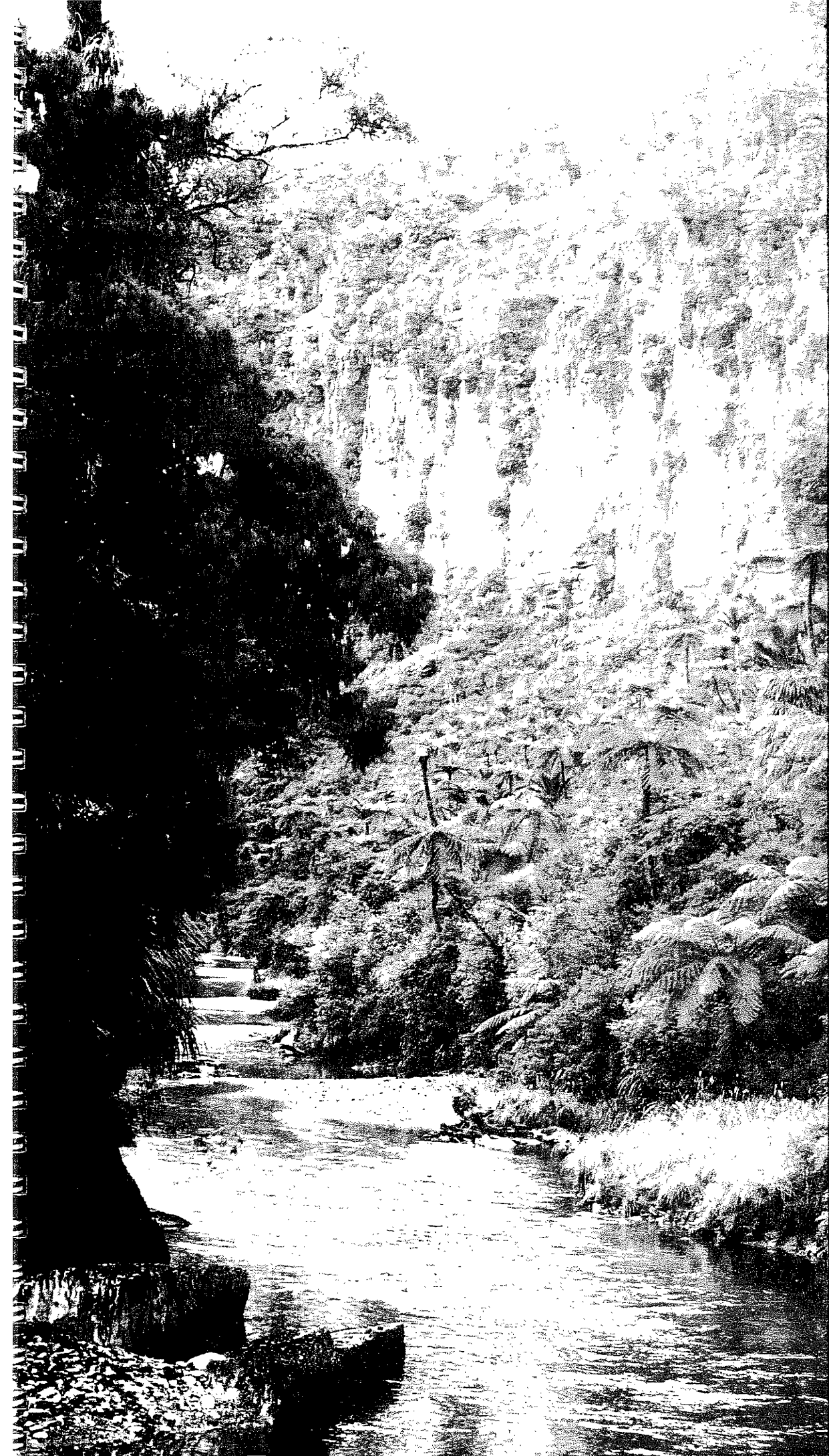
Paparoa National Park is administered and managed to achieve the aims of the National Parks Act 1980 and in terms of the General Policy for National Parks. These are referred to as the Act and the General Policy respectively throughout this plan.

The West Coast Conservation Board's role in respect of the national park is directed to policy formulation and ongoing supervision of the implementation of these policies by the Department of Conservation. Section 5.4 summarises the actions required to implement the management policies, but the structure of this management plan is such that the detail of these actions is contained within the Policies sections of the plan.

The Board consists of not more than 12 members appointed by the Minister of Conservation. It is assisted in its deliberations by the Director-General or the Director-General's nominee, who has the right to attend and speak at all meetings, but may not vote. The Board is serviced by the Department of Conservation through the West Coast Conservancy.

The park is managed on a day to day basis by the staff of the department under the control of the Field Centre Manager, Punakaiki who is responsible to the Northern Operations Manager, Hokitika.





the park

THE PARK

Paparoa, the most recent addition to our national parks, is a showpiece for nature's intriguing diversity.

From the ancient, weathered peaks of the Paparoa Range to the finely sculpted rocks of the coastline, it is a powerful landscape which demands respect and preservation.

Linking mountains and coast is a low-lying forested basin, much of it formed on limestone rocks. These rocks, through solution, give rise to a special landform known as karst, a mysterious zone of caves, potholes and spectacular gorges where streams disappear and emerge apparently at random. The syncline, as the basin is known, is one of the highlights of a park of complex character.

Paparoa is described in legends of the tupuna as a source of both spiritual and physical resources and is of high cultural value, especially to the people of the Katiwaewae hapu of Ngai Tahu. The tupuna are woven into and are the landforms of the park.

Most travellers who have looked upon this mass of irregular landforms have left deeply impressed. In 1827 French navigator Durmont D'Urville and his crew gazed in awe upon "mountains of a considerable height, several breaking up into sharp peaks at the summit". Well travelled explorer and scientist Julius Haast was so entranced by the coastline in 1860 that he immediately had memories of the Italian Riviera, "celebrated for its beauty, and to which it alone can be compared". Goldfield warden Charles Broad, travelling through the interior in 1867, described the scenery as "very romantic, being bounded up very steep limestone cliffs steeply scarped, and crowned and clothed with bush".

But when author Andy Dennis looked out on the full landscape from an exhilarating vantage point high in the Paparoas 120 years later, he was seeing beyond the immediate view:-

"...I have always found it difficult to watch a dawn or sunset from the crest of the Paparoa Range without finding my thoughts stealing off to overviews of a different sort; to the way we think of wilderness; to the value we place on those parts of our land which are still wild and unspoilt; and to the kinds of places this whole planet so urgently needs to preserve not only for our own escape, adventure and enrichment, but also for plants and animals whose tenure long predates our own, but who cannot speak for themselves."

The great diversity of ecosystems between the mountains and sea contribute to an harmonious whole. In the Pororari basin alone, botanists have identified at least 25 distinct forest communities, each moulded by its soil and microclimate.

The variety of flora expected in a region extending from mountains to sea is accentuated by marked differences in climate. Proximity to the Southern Alps can have a cooling effect on the Paparoa tops, while the Tasman convergence, which brings water warmed in the Coral Sea across to the West Coast near Punakaiki, contributes to the moist temperate coastal

climate. The result is a lush covering of subtropical lowland rainforest, tapering into alpine scrub and grassland at higher altitudes.

Nikau palms and northern rata are close to the southern limits of their distribution, and the warm climate also favours masses of kiekie and treeferns. Nikau, which rival the famous pancake rocks as a symbol of Punakaiki, also occur well inland in small groves and are a delightful part of the forest mosaic.

The relatively unmodified qualities of the forest, the lowland climate, the altitudinal range from alpine tops to the sea and the high fertility limestone ecosystems support a diverse native forest bird population with the highest densities recorded in the South Island.

The maritime microclimate is probably a major reason why one of New Zealand's avian oddities nests exclusively near Punakaiki. The Westland petrel is a winter breeder, spending the rest of the year at sea. Couples raise their chicks in burrows high on mudstone terraces, taking off for their daily feeding flights from exposed rocks or trees and crash-landing through dense undergrowth when returning in the evenings. Seeing thousands fly in at dusk is another memorable experience the park offers.

Among the many other native birds living in the park, the great spotted kiwi is particularly noteworthy. The Paparoa population is regarded as important, as it is one of only two areas where numbers are known to be relatively high. The great spotted kiwi can be found from sea level to the top of the ranges at 1200 metres or more, but seems comparatively rare in the low country.

Other animals inhabiting the park today include more than 25 species of land snails, the largest and most spectacular of them living in the limestones of the mid-Pororari gorge. The diversity of the plant life also contributes to a diverse and interesting insect fauna.

Introduced animals, especially goats, have spread widely throughout the Paparoas. Their effect on the park has been disastrous; with many palatable plant species being eliminated except in a few inaccessible areas. The impact of goats has been most noticeable in the warm forests on the coastal and inland limestone and in the alpine zone.

Red deer numbers are low, and they actively avoid the broken terrain of the karst area. However, possums are widely distributed and apparently on the increase. Cats and dogs, domestic and wild, pose a serious threat to native bird populations in the park, especially to the Westland petrel, kiwi, little blue penguin and sooty shearwater. Rats and stoats are plentiful and often attack birds, particularly at nesting time.

The rugged Paparoa landscape has long been a barrier to humans, but has not prevented the sort of environmental consequences which are characteristic of their occupations. The coastal strip has had a particularly lively history, with Maori occupation, gold rushes, timber milling, farming and tourism.

Recent evidence suggests the Maori explored and settled the West Coast some 800 years ago. Although no permanent settlements in Paparoa were recorded by European explorers (the

nearest being the small Kararoa kaika about 25 km to the south of Punakaiki), the coastline was the pathway between Mawhera and Kawatiri and a source of flint, pounamu, seafood, birds and edible plants.

Pakeha started travelling through in large numbers from the start of the West Coast gold rushes in 1864 with the population reaching a peak, for the 19th century, two years later with major rushes to Fox River and Charleston. Brighton, at Fox River mouth, was a sizeable shantytown, and was even a port of entry for a short time, servicing diggings on sea beaches and raised terraces all along the present park frontage.

Within a short time much of the easily accessible timber on the coast had been used for buildings and mining equipment, forcing sawyers to travel several kilometres up the main river to fell trees and float sawn timber downstream to the diggings. Sawmilling for general purposes began early this century in the Tiropahi basin, and mills around Punakaiki drew timber from the karst area between Bullock Creek and Punakaiki river and from Te Miko until the last mill closed in 1969.

Farming started during the gold rush. Stock were brought in at first by boat, and then via the Inland Pack Track formed in early 1867. They were grazed along the coastal strip and on flats up Fox River. By 1869 large portions of both areas were under cultivation and produce was being sold outside the district.

Bullock Creek farm, now an enclave in the centre of the park, was probably grazed from 1867, and proper clearing was done between 1874 and 1881. Gold miners who remained after the rushes gradually turned to agriculture, and early this century the government offered most of the unoccupied land on the coastal strip for farming leases in perpetuity. Only a small proportion of the area was taken up, and many would-be farmers abandoned what proved to be unmanageable land, but some farms remain today.

Flax cutting at all accessible sites along the coastal strip started early this century, supplying a mill at Barrytown, and continued until the 1950s. Areas of scenic reserve in such places as Dolomite Point and the foot of the present-day Truman Track did not escape exploitation, even though they had been reserved as early as 1914. In a few cases, cutters were caught and fined.

When human activity has ended, vigorous regeneration has constantly worked to repair the damage. In some cases, it has added an attractive variation to the forest, such as a much-photographed expanse of treefern on a formerly cleared hillside above Irimahuwhero Point.

Tourism took a long time to develop. This is surprising in view of the quality of scenery, but less so in view of the difficult access. Conducted tours of Fox River caves began around

1908, but it was 1929 before road traffic through the region was possible, and another two years before all the major rivers were bridged. The 1930s saw six new scenic reserves created between Fox River and Lawson Creek, and the establishment of Punakaiki village as the centre of a series of permanent and holiday homes between Razorback and Te Miko.

A proposal for a large-scale timber industry based on the West Coast beech forests in 1973 led to the formation of the Beech Forest Action Committee, which became the Native Forest Action Council (NFAC, now the Maruia Society), who pressed for places of special value to be reserved. The clamour for protective measures, especially for the lowland forests on the karst, increased with a 1978 proposal by Park (DSIR) and Bartle (National Museum) for an ecological area based on the Pororari.

In 1976 Federated Mountain Clubs had identified the northern Paparoas as a potential wilderness area and in 1979 NFAC proposed a 130,000 hectare national park, including this and land to the north and east. This eventually led to the National Parks and Reserves Authority identifying the western Paparoas as a prospective national park. Meanwhile, the joint proposal by the DSIR and the National Museum succeeded in having a core area of great ecological significance, the forests of the lowland karst syncline, gazetted as the Pororari Ecological Area in 1979.

The initial proposal for a large park incorporating the wilderness area was rejected, but after seven rounds of public submissions, and help from other environment groups including the Royal Forest and Bird Protection Society, the present park of 30,327 hectares was gazetted on 23rd November 1987.

The visual and physical boundaries between the mountains, karst and coastline can be used to divide the park into distinct landscape units to assist management (Figure 2). However, many management issues and proposals apply to the park as a whole. The landscape units are thus a conceptual management tool rather than strict scientific features.

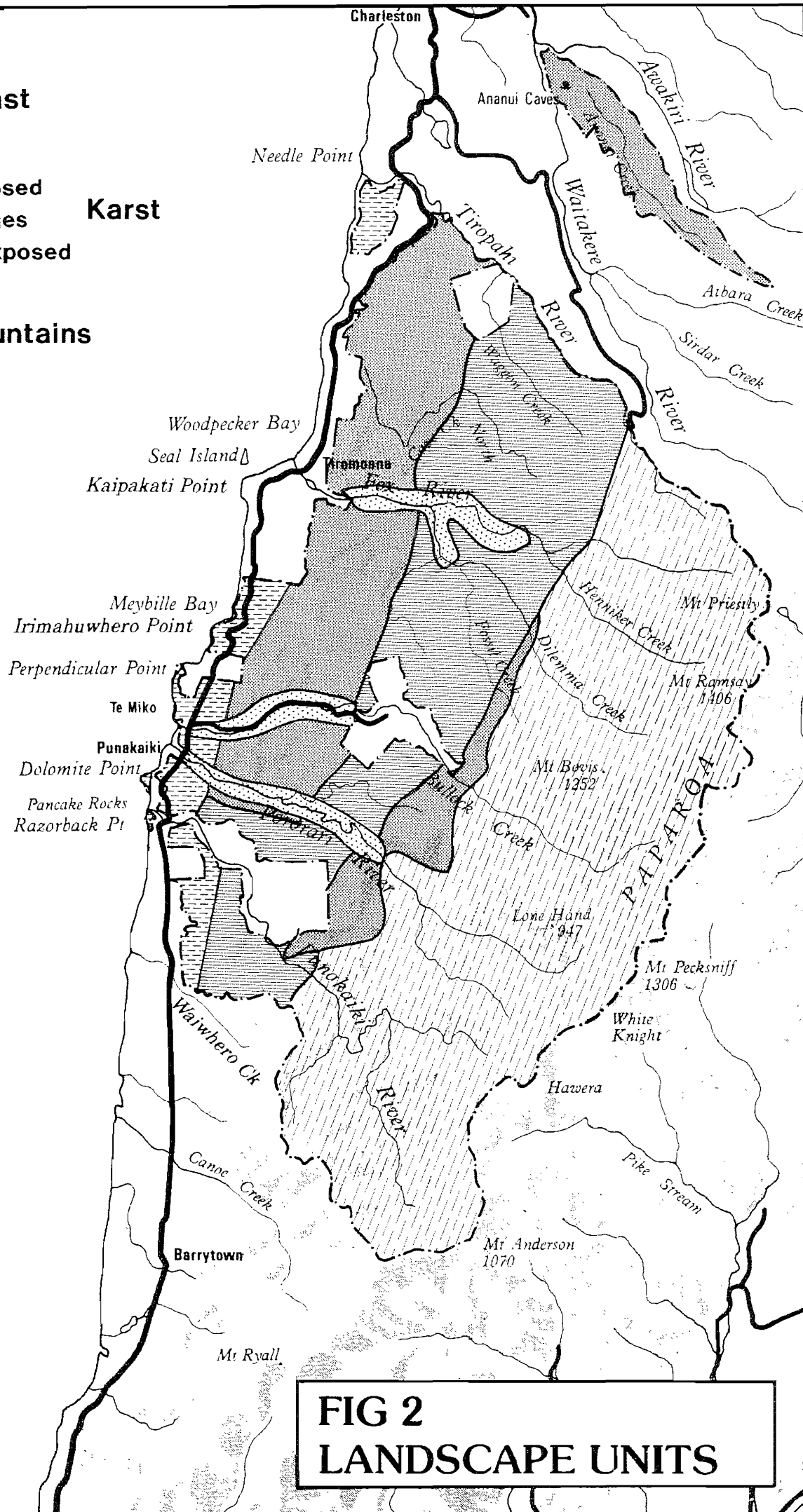
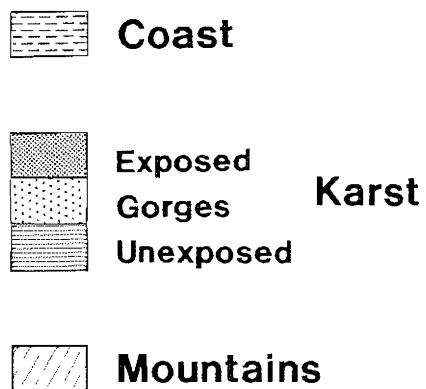


FIG 2
LANDSCAPE UNITS



THE COAST

The Paparoa coastline is a visual feast for the traveller. Whether attacked by storm, shrouded in drizzle or seen under clear skies with a still sea, the coast presents a dramatic spectacle.

High cliffs cut away by heavy seas are indented with coves and sandy beaches. Small islands thatched with hardy vegetation stand just offshore, and weather-blasted rock sculptures are a feature of many beaches. Above the shoreline the seafront is dominated by the great cliff of the coastal escarpment sweeping upwards in smooth curves - possibly the inspiration behind the name Paparoa, or "long flat rock".

A significant feature of the coast is the Westland petrel colony site on terraces just south of Punakaiki river. These terraces were once islands, which became part of the mainland when New Zealand was uplifted quite recently in its geological history.

The most distinctive feature, however, is undoubtedly the "pancake rocks" at Dolomite Point, where evenly layered stacks of platey limestone have been eroded in places to form surge pools and blowholes.

The sea also exerts its influence on the vegetation which spreads inland from the very edge of the coast. At first there is just a low, protective mat where only the hardiest of lichens and creeping plants survive against salt-laden wind and waves. This coastal turf merges into a low, dense shrubland of flax and cabbage trees. Further inland the sea's more positive effects can be seen as lush, subtropical vegetation, featuring nikau palms amid entanglements of kiekie and supplejack, which thrives in the mild and humid climate. Common forest trees also grow close to the sea, but only attain great size in sheltered situations.

Where the low forest backs up against the coastal scarp, it is windshorn and in some places salt-burnt as well. Timber extraction along the coastal strip since the gold rushes has left few of the tall and ancient rimu, miro, matai and kahikatea which formerly stood clear of the broadleaf canopy. Now the most conspicuous emergent trees are the huge northern rata.

The geographical boundaries of the park present some difficulties for management. There are certain patches of great ecological interest (such as Nikau Scenic Reserve and Seal Island) outside the park and with different protective status, yet they are plainly an integral part of the area's unique character and landscape. Another difficulty is that many visitors confine their park visit to the narrow coastal strip and much of this land is not administered by the Department of Conservation. Even where the park does reach the coast, the boundary is arbitrarily defined as the mean high water mark.

THE KARST

Although it is nationally renowned among cavers and trampers, the lowland forested karst of Paparoa paradoxically remains the park's least-known asset. Most visitors' initial contact with the park is confined to the coast, and the traveller's view is usually bounded by the crest of the coastal scarp. Tantalising glimpses of the mountains beyond are provided by the major river valleys, but most people pass through without seeing the land between. Intimate knowledge of the karst lowlands requires more exploration than most could undertake, but those who do so are invariably highly rewarded.

The river gorges, confined by high, forest-crowned limestone cliffs, provide ready access to the park's karst interior. In many of the tributaries the gorges become narrower, steeper and more spectacular, with waterfalls as added surprises - but these delights give little idea of the true complexity of the area. Dry, mossy streambeds, karren, dolines, blind valleys and basins where water emerges from caves or vanishes into sinks are all constant reminders of the complex subterranean system beneath the traveller's feet.

Intricate systems of shafts, passages and caverns have been slowly formed by the continual effects of water through the soluble limestone. The forest ensures that this process continues by supplying decaying vegetation to add to the acidity in the flowing water.

The largest single feature in the karst unit is the Barrytown Syncline. Limestone is exposed on both flanks of the syncline with more recent gravels and mudstones occupying the low-lying area in between. These more easily erodible rocks overlie interstratal karst.

The majority of known cave systems are in the western side of the limestone syncline where underground drainage patterns are concentrated mainly along horizontal lines of weakness in the bedding planes. However, it is likely there are well developed systems on the eastern side. Exploration, mapping and research have proceeded far enough to indicate that vast labyrinths still remain to be discovered.

Many of the caves are storehouses for important fossil and sub-fossil material of birds, reptiles and even mammals. The Ananui (Metro) cave once held nationally important bird bone deposits, while the adjoining Tiropahi (Four Mile) area contains significant Oligocene fossil whale deposits.

Permanent cave dwellers are also fascinating. Animals such as the eyeless, flightless depigmented ground beetle, Erebotrechus infernus, millipedes, harvestmen and newly discovered species of weta have adapted to the stable environment of caves. However, the numbers of species are usually very low, and vulnerable to changes in their environment and food chain.

Speleothems (cave formations or decorations) vary according to vegetation cover, rainfall, solubility of the limestone and frequency of flooding. They are always fragile, and once damaged or destroyed have little or no ability to regenerate to their original state. The unusual low-light tolerant plants which grow in typically shallow, moist karst soils around cave entrances and in dolines are also extremely vulnerable.

The essence of the Paparoa karst country is its largely unmodified character. The quality of the water flowing through this area can be adversely affected by logging, mining and agriculture, which could stress the underground systems and cause irreversible damage.

The fact that Paparoa provides the best example of forested lowland karst in the country was very important in its preservation as a national park. Also important was the diversity of its natural forest cover, resulting from complex geological, geomorphic, soil and climate patterns.

The unusual topography of the syncline and its river gorges contributes to the variety of microclimates. While the karst unit is still very much under the influence of the coastal climate, temperatures in the larger river valleys are also affected by cold air from the tops flowing downwards and finding its way out to the coast. This cooler influence means much of the vegetation in these valleys is quite similar to that at higher altitudes.

Peculiarities of location, aspect and altitude can create pockets of plant species which appear quite out of place. For example, groves of typical coastal species such as nikau palms, large northern rata and entanglements of kiekie recur on the inland side of the Pororari basin, eight kilometres from the sea. Large sinkholes, or dolines, frequently contain evidence of temperature inversion, with warmth loving plants near the top and cold tolerant ones below.

The range of habitat types in the karst matches the complex flora. Birds in particular have profited from this, and there are large populations and a rich diversity of species.

The abundance of flora and fauna in itself attracts people, but there are also those who are intrigued by the karst features. National park status increased public expectation of being able to visit caves, and controls are often controversial and difficult to enforce. More robust caves will therefore need to be identified for general public access, in addition to the original Fox River "Tourist" Cave. There is also potential for commercial guiding, which is at present confined to a temporarily permitted operation in Ananui Cave.

As a form of recreation, caving is very specialised. Organised caving groups, normally belonging to the New Zealand Speleological Society, perform a valuable function in exploring, mapping and documenting caves and other karst features, which is essential information for management.

THE MOUNTAINS

More than half the park is best described as mountainous, from the eastern edge of the syncline to the crest of the main range. On their eastern side, an assortment of hanging valleys, truncated spurs, towering bluffs and cirques overlook deep glaciated valleys running north and south.

The predominant ancient granite and gneiss rocks of the Paparoa mountains bear a closer geological resemblance to those in distant Fiordland than to the main range of Southern Alps. This is because the Alpine Fault has separated them from their original neighbours over the last 10 million years. The rocks of Mount Lodge, the highest in the park, are the oldest known in New Zealand.

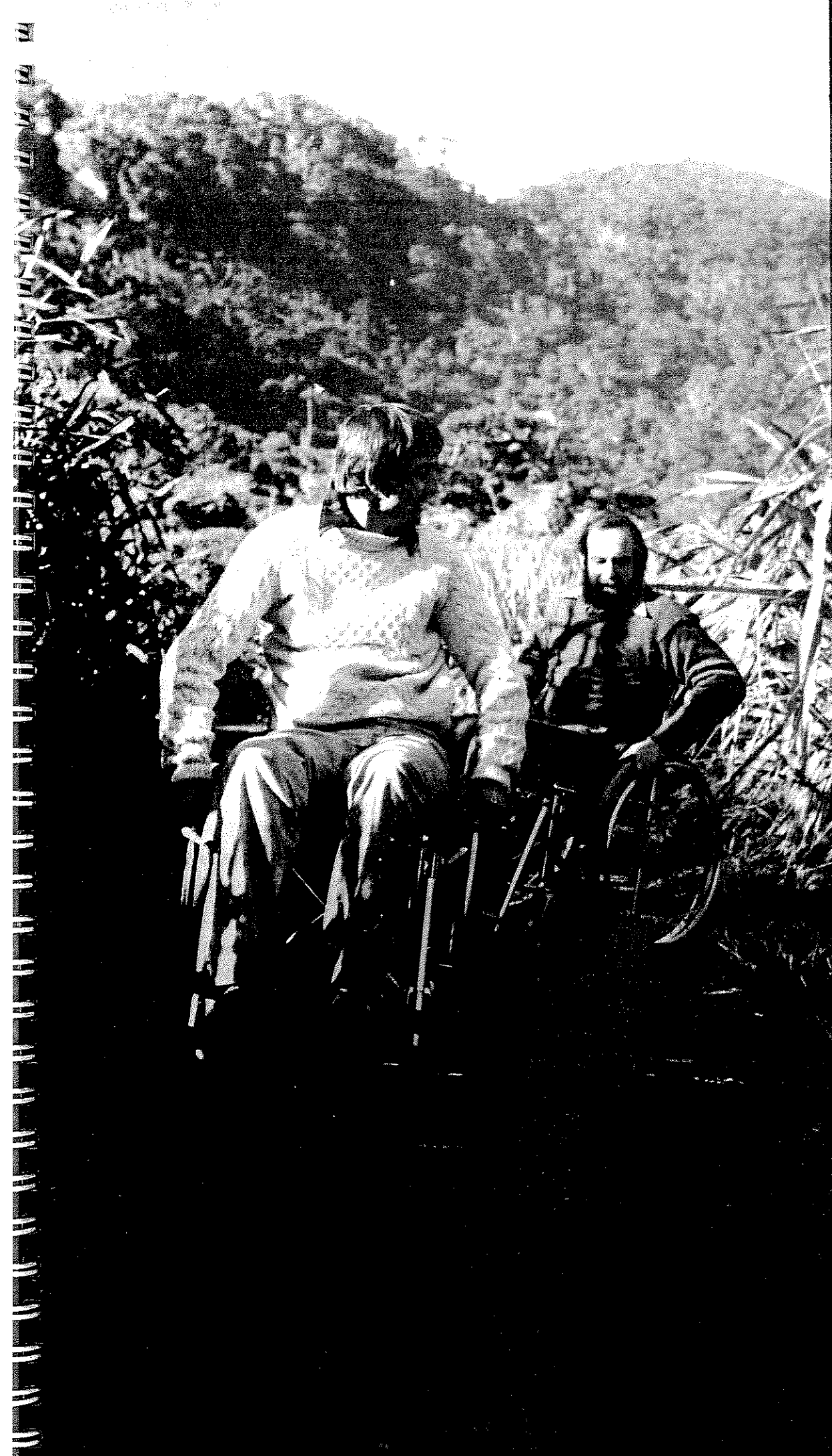
The jumble of craggy peaks and pinnacles in the central and northern sectors of the range form a distinctive natural border and present a formidable challenge to any who try to traverse the tops. Adding to navigation hazards are the masses of cloud which often drape the peaks, even when it is spectacularly sunny on the coast. For those who know their way in the high country, however, these veils of mist create a special aura.

A wet, cool montane climate helps make the spine of the Paparoa Range very different from the humid coastal lowlands. At the bushline, open silver beech forest merges with sub-alpine scrub of dracophyllum, pink pine, coprosma, and mountain flax. The proportionally small area of the park above the bushline contains a great variety of herbacious species and a number of the more spectacular plants such as alpine daisies and gentians. Expanses of golden snow tussock are a predominant feature along with olearia shrubs, cushion bog and carpet grass.

Animals inhabiting the high country range from the introduced chamois to a small alpine snail with a long name Powelliphanta rossiana gagei. High numbers of feral goats are found in the upper catchments of the Punakaiki and Pororari Rivers and on the alpine tops with the usual drastic effects on the vegetation.

The Paparoa Range is the least visited area in the park and, therefore, has fewer demands placed upon it. To the north and east of the park is the proposed Paparoa Wilderness Area. Mountains can retain their wilderness quality with little planning or management. Their vegetation, soils and sense of solitude remain vulnerable, however, to damage through inappropriate track development.

A route to Mt Bovis above Bullock Creek Farm provides the visitor with an alpine experience without intruding into other parts of the range. Otherwise access is available to all, but only on nature's terms.



aims and objectives

3.1 MANAGEMENT AIMS

The principles to be applied to the management of all national parks in New Zealand are set out in Section 4 of the National Parks Act 1980. Two fundamental concepts are involved. Firstly, the area is to be preserved in perpetuity for its "intrinsic worth" namely distinctive scenery, ecological systems and beautiful, unique or scientifically important natural features. Secondly, the area is protected for the "benefit, use and enjoyment of the public".

These two concepts are not always compatible and the potential exists for conflict between competing uses or visitors. The Act makes it clear that the right of access of members of the public into national parks is subject to "such conditions and restrictions as may be necessary for the preservation of native plants and animals or for the welfare in general of the parks". In most cases this means that the way in which people make use of parks and the kind of recreation which takes place within them must be consistent with preserving the "intrinsic worth" of the natural environment. The pre-eminent consideration is thus the right of other living things to be left undisturbed.

As a consequence of such preservation it is possible for humans to receive reflective, imaginative and spiritual responses from the solitude of unmodified landscapes, and from encountering wilderness on nature's own terms. This opportunity becomes of itself a right worthy of safeguarding. Care is needed to prevent erosion of the quieter, more self-sufficient experiences Paparoa can provide and to minimise the intrusion of human interference.

Park management therefore seeks to balance the protection of natural and historic resources with the demands and aspirations of the park visitors.

Having regard to the Act the management aims for Paparoa National Park, in descending order of priority, are:

- PROTECTION -

TO PRESERVE THE PARK AS FAR AS POSSIBLE IN ITS NATURAL STATE.

- USE -

TO FACILITATE THE PUBLIC USE OF THE PARK.

- ADVOCACY -

TO ENABLE VISITORS TO ENRICH THEIR EXPERIENCE BY PROVIDING EDUCATIVE AND INFORMATIVE MATERIAL ON ALL ASPECTS OF THE PARK.

3.2 MANAGEMENT OBJECTIVES

It is inevitable that expectations differ as to what a national park should be, and, in the case of Paparoa National Park, what facilities should be provided. Paparoa is a new national park and as demands for its use grow, conflicts and dissatisfactions may occur. Park management will endeavour to enhance opportunities for its use whilst resolving and minimising these conflicts. However, at all times the guiding criteria for management decisions remain the Act, the General Policy for National Parks, this management plan and park bylaws.

The management objectives provide a link between the basic management philosophy and the policies which give guidance for the day to day management of the area. In this way objectives translate the nationally established principles of the aims into statements that have specific relevance to Paparoa National Park.

The park and adjoining lands support a wide range of opportunities which potentially allow visitors with varying time, means and physical capabilities to experience and enjoy a variety of natural and cultural features. As far as possible a range of recreational and tourism activities which are compatible with the protection of conservation values will be catered for in the park. The appropriateness of any activity will need to be determined by its impact primarily on the environment and secondarily on other visitors rather than by its popularity, the weight of public demand, and how much revenue it might attract. When assessing the appropriateness of activities or developments within the park it is also necessary to consider the spectrum of opportunities available elsewhere on the West Coast. It is not intended to provide for every conceivable recreational use within the park, especially where some uses would be more appropriately accommodated outside the park or may even be already fully provided for elsewhere.

Equally, where activities are compatible with park values and it is envisaged that they be catered for in the park, such usage throughout the entire park may be undesirable. Facilities in the mountains, for example, are virtually non-existent limiting use of this landscape unit to experienced trampers and hunters. If a decision is made to concentrate developments in the coast and karst units then the remote and wilderness experience demanded by some visitors is protected whilst others who prefer areas with well developed tracks are provided for elsewhere.

It is also important to recognise that the natural processes active within the park place significant constraints on the nature and level of development that can be undertaken and sustained in many areas. The syncline, for instance, is in many respects a more fragile ecosystem than anything else within the park. Any developments planned for the karst unit must therefore take full cognisance of the need to protect its delicate landform, soil, water and biological values.

Whilst the approach to public use outlined above, and in the previously described management aims, provides a specific management direction it is not possible to formulate a simple definitive statement setting out where the balance between preservation and use will be struck. Each case has to be considered on its individual merits, based on sound resource management considerations and where necessary with public input.

There is an ongoing need for enhancing knowledge of the natural features and processes in the park. Research into the physical and biological environment, visitor numbers and expectations, and the impact of humans and wild animals on the environment is essential if park managers are to protect natural values whilst allowing public access and enjoyment.

A two stage system is therefore proposed to facilitate the formulation of discrete management policies. Firstly, a series of separate objectives that seek to establish an order of precedence between them and, secondly, a description of themes that define overall concepts for each landscape unit. The management objectives are listed below in descending order of priority.

- PROTECTION -

Preservation

To manage the park so that it is preserved as far as possible in its natural state and to protect and enhance the habitats of indigenous plants and animals, soil and water values and its natural peace and tranquility.

Maori Cultural Values

To recognise the spiritual and cultural significance of the area now called Paparoa National Park to Maori and to give effect to a partnership with Ngai Tahu on park management in keeping with the principles of the Treaty of Waitangi.

Historical Values

To recognise, protect and enhance historic values, sites and objects of significance to the past occupation and development of the Paparoa area.

Research

To promote and undertake research on the natural resources and processes, and cultural heritage of the park and on the socio-economic implications of changing patterns of visitor use.

- USE -

Use and Development

To encourage appropriate visitor use by providing a range of facilities and opportunities that complement those provided outside the park and that reflect and enhance the special character of the Paparoa area whilst having due regard to the protection objectives and the physical constraints imposed by natural processes and recreational carrying capacities.

- ADVOCACY -

Education and Interpretation

To foster, through provision of facilities and services to the public, an appreciation and awareness of the values of Paparoa National Park, and of environmental and historical conservation generally.

Liaison

To co-operate and maintain an effective relationship with those authorities, agencies, communities and individuals whose responsibilities or whose decisions have an effect on the park and its management to ensure co-ordinated resource management.

3.3 THEMES

Landscape units have been defined as a response to the broad areas of recognisable "uniformity" within the park boundaries. (see Section 2) Themes take the description of landscape units a step further by seeking to capture in a somewhat qualitative and spiritual manner the essence of the areas concerned.

Themes reflect underlying feelings about dominant aspects of the park, from the stories to be told (interpretation) to the promotion of the park (marketing).

Every park has a unique character that conjures up an immediate image in people's minds. This may vary in detail for different people, but there are always common elements that identify a particular park.

In the case of Paparoa National Park the dominant themes are:

- * a sequence of natural ecosystems from mountains to the coast;
- * a lowland karst landscape, different from any other national park;
- * diverse and rich forest plant and birdlife;
- * water and its role in shaping the karst landscape;
- * coastal dynamics; and
- * opportunities for all ages and types of people.

Section 5.3.2 recognises the need to promote the park while Section 5.2.3 specifies that an interpretation strategy will be prepared. The following table provides guidelines for both of these by describing the elements which relate to each landscape unit and the park as a whole. The themes also have a broader application by helping guide general management.

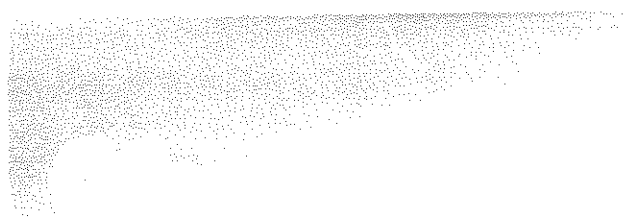
TABLE 1

THEMES FOR PAPAROA NATIONAL PARK

	THE PARK	COAST	KARST	MOUNTAINS
PHYSICAL SYSTEM	<i>Limestone and Water</i>	<i>High energy, rocks and beaches</i>	<i>Limestone, Gorges Caves and Underground streams</i>	<i>Ancient and Rugged</i>
LIFE SYSTEM	<i>Diversity and Mystery</i>	<i>Lush, warm rich</i>	<i>Diverse forests and animals</i>	<i>Wilderness</i>
HUMAN SYSTEM	<i>Opportunities</i>	<i>Moody and spectacular</i>	<i>Discovery and mystery</i>	<i>Challenge</i>



management issues



4.0 PREAMBLE

Various tools will assist in meeting the challenge of guiding management in a direction that both maximises opportunities for use whilst recognising the need to preserve natural and historical values. Of particular importance are the management aims and objectives described in Sections 3.1 and 3.2 respectively. To enhance their utilisation it was necessary to establish an order of precedence within the management aims and objectives. Public use and enjoyment need to be compatible with the primary objective of preservation. In determining the extent to which such uses will be allowed, however, consideration must be given to their location and nature as well as to the opportunities for the use to be carried on outside the park.

The landscape units have been described and delineated to provide an on-the-ground framework for policy-making (see Section 2 and the Paparoa National Park Resource Summary). Overriding themes (see Section 3.3) have also sought to encapsulate the essential elements of each unit.

4.1 ISSUES IN THE PARK

Introduced Plants and Animals

Introduced animals are regarded as a major issue throughout the park.

Feral goats are wide ranging and are having a substantial impact on park vegetation. The areas under greatest impact at present are the inland limestone escarpment and the alpine vegetation types, but goats are present in substantial numbers throughout the park. In Paparoa National Park, several plant species are significantly less common than would normally be expected (eg Ranunculus insignis and R verticulatus in the alpine communities, Brachyglottis buechananii and Pseudopanax colensoi in the subalpine ones) and this is almost certainly due to goat browse. Severe understorey damage has also been observed in the forests of the karst unit. Goat control is considered one of the most urgent priorities for park management. At the time of publication the department had already embarked on an intensive goat control programme.

Possums are present throughout the forested part of the park, and dieback of northern rata on the coastal limestone escarpment and talus slope forests is largely due to possum browse. This dieback appears to be continuing. The coastal limestone forests have high visual qualities as well as being important ecologically. Control of possums is underway and is accepted as an ongoing component of park management.

The General Policy recognises that whilst the intention of the Act is as far as possible, extermination of introduced animals the "immediate objective shall be the reduction by all available means of their numbers to a level the (indigenous) flora and fauna can tolerate". Strategies have been developed that reflect the real values to be protected and are possible to achieve given the resources and technical skills available. Management of introduced animals will require that an acceptable level of impact be determined that the ecosystems can sustain without loss of their intrinsic values. Introduced animal densities should then be managed to a level that does not exceed this level of impact. Manipulation of animal populations to any density below their "natural" equilibrium will require regular control operations necessitating a commitment to the provision of resources for this purpose in perpetuity.

The Westland petrels are threatened from a number of sources. They suffer predation by wild cats and dogs and, to a lesser extent, birding by humans. Their nesting habitat is also damaged by goats, possums, domestic cattle and trespassing people. Present boundaries do not include all known nesting burrows, although the birds in these sub-colonies are protected by the Wildlife Act 1953. Management issues would be less complicated if the status of such land was changed to protect the habitat of all the known nest sites (noting that the adjacent Royal Forest and Bird Protection Society's reserve can already be managed in harmony with the park).

Disturbance by adjoining land use, rural housing, intensive farming practices, road traffic on State Highway 6, utility overhead wires, artificial lights, and mining activities adjacent to the colony will continue to have detrimental effects on flying birds.

The control of introduced plants is also an issue of concern due to the potential of weed species to adversely affect indigenous plant communities. The degree to which resources should be utilised for control should reflect the seriousness of the infestation and the impacts on native species. The species considered to be of most concern are gorse, wild ginger, broom, German ivy, banana passionfruit, jointed rush, wandering willy and ragwort. The humid lowland forests are also vulnerable to invasion by a number of aggressive species not currently found in the park such as sycamore, Himalayan honeysuckle and Old Man's Beard (*Clematis vitalba*).

Increased Visitation

With the establishment of Paparoa National Park, human use of the area is likely to increase, with an increase in associated impacts on the environment. In the short-term the most vulnerable areas are the coastal fringe, karst, caves and cave entrances. Fragile alpine wetlands are also likely to be under pressure from increased human use in the longer term. In all cases the department will need to ensure that appropriate recreational facilities are developed in conjunction with education and interpretation to minimise impacts.

Mining

The park contains a number of minerals particularly coal, gold and limestone. A number of licences and applications for coal and gold cover much of the park with the majority being exploration licences.

Mining activities are incompatible with national park values and principles. Current legislation, however, means that national parks are open for mining and that each application must be treated on its merits. The National Parks and Reserves Authority's report to the Minister of Lands on the park proposal included an analysis of the mineral values. These were weighed up against the conservation values prior to the park boundaries being drawn up in 1987. Several valuable natural areas were excluded as a consequence.

When the NPRA proposed the boundaries of the national park a small part of the Pike River coalfield was retained within the park. Provided that it showed significant economic benefits to the country as a whole and the region in particular, and subject to adequate environmental planning and safeguards, the NPRA gave qualified acceptance to the development of the coalfield within the boundaries of the park (see Policy 5.2.24).

The prospecting licence area held by New Zealand Cement Holdings (now Milburn NZ Ltd) to investigate the limestone in the Tiropahi was excluded from the park pending a final decision on the area's future. The development of an open-cast quarry in the valley would have severe adverse impacts on the Tiropahi's natural values. Should mining not eventuate then the potential for it to be added to the park will again be evaluated.

Ecological Representativeness

In accordance with the General Policy park additions have not been otherwise addressed in this plan (with the exception of several adjoining scenic reserves which have been proposed for investigation). However, it is important that consideration be given to adding certain habitat and landscape types to the park as their exclusion compromises the ecological representativeness of lowland ecosystems for which the park was established. There are no estuarine or sand dune systems within the park and coastal features, in general, are deficient. Karst/syncline ecosystems are also particularly under-represented nationally. Much of the remaining area outside the Paparoa National Park, that was part of the original larger national park proposed by NFAC in 1979, is included in the proposed Paparoa Wilderness Area that is to be investigated by the department. The investigation will determine the appropriate protective status of this land. Any finalised wilderness area would be managed so as to preserve indigenous natural resources and a wilderness experience.

Commercial Recreation

In promoting the concept of a national park for the Paparoa area it was argued that economic benefits would accrue from the park for the region. Within this context there is a case that management foster ventures by concessionaires. The Concessions Policy, prepared for the National Parks and Reserves Authority by the Department of Lands and Survey*, provides a framework for dealing with such commercial activities and the management plan translates the principles into guidelines relevant to Paparoa National Park. A balance needs to be established that ensures that the natural resources are protected whilst catering for suitable public use.

Airplanes and helicopters enhance the appreciation of the park for some visitors, but they detract from the park's general amenity values of quietness and remoteness. Unfortunately the main places where it is perceived there exists a demand for such usage, namely the scenic river gorges, the open Bullock Creek Farm and over Dolomite Point, are the worst places to envisage this use taking place. If the natural character of remote experience and quiet appreciation is to be retained then low altitude airplane and helicopter scenic flights and landings cannot be countenanced for the park. It is also appropriate that a restricted airspace be imposed around the petrel colony to avoid excessive disturbance of the birds by low-flying aircraft.

* *At the time of publication of this plan the department was seeking approval of a revised Concessions Policy, which includes The Policy of the New Zealand Conservation Authority on Concessions for Recreation and Tourism Business Operations in National Parks. This policy should be consistent with the General Policy for National Parks.*

Ngai Tahu Interests

The department recognises the traditional and spiritual significance of the area now referred to as Paparoa National Park to Maori. Through existing boards and runanga and any newly incorporated runanga, in conjunction with informal contact, the advice and cooperation of Poutini-Ngai Tahu will be sought in the management of the park. This is especially important in matters such as traditional fishing rights, traditional use of plants, historic and archaeological sites, utilisation of park waters and the general well being of the whole spiritual dimension of Paparoa.

For many issues the position of Poutini-Ngai Tahu is in accord with that of the department and the conservation board. For example there is agreement on the need to eradicate introduced plants and animals which are destructive of important Maori values. On the matter of indigenous animals, however, there is divergence of opinion. The department is required to manage indigenous animals in accordance with the National Parks Act and Wildlife Act. Acting in good faith Poutini-Ngai Tahu are unable to exercise their traditional rights to harvest mahinga kai species. Thus, Poutini-Ngai Tahu believe the mana of species such as weka, kukupa, kaka and taiko (Westland petrel) has been eroded. The department will endeavour to give effect to the principles of the Treaty of Waitangi in park management, but this must always be within the limits of current legislation.

4.2 ISSUES ON THE COAST

Park Boundaries and Adjoining Land Use

The coast is the narrow, fragile zone between the forests and the sea. It is a limited resource both conceptually and physically. The coastal landscape unit of Paparoa National Park is surprisingly small (Figure 2). Given the public perception of the park as "coastal" this is a major concern in itself, but it also has significant implications for a number of separate issues. As has been identified the focus of park usage is the coast and more particularly the visual and landscape values as perceived from State Highway 6. This is in contrast to the majority of other national parks where the focal points are generally in the centre. The main problem ensuing from this unusual situation is that the qualities of the area the majority of visitors associate with Paparoa National Park lie largely outside the park's boundaries. To obtain suitable control over the management of this important peripheral area it is desirable to initiate an appropriate programme of protection for adjoining areas through voluntary negotiation. This will be complemented by ongoing close liaison with adjoining landowners, local authorities and other agencies.

The importance of State Highway 6 has also been recognised, from the point of view of its inter-relationship with the park, through a separate policy section. Of particular concern is the need to provide for safe pedestrian access from the Punakaiki River to Truman Track. Currently visitors are required to walk along the road. All park and highway management works relevant to State Highway 6 will be undertaken after consultation between the department and Transit NZ.

In general the main issues in the coastal area arise from conflicts between the provision of services for people and the protection of the coast's biotic and visual values. Road construction and roadside maintenance, powerlines, baches, sewerage and rubbish disposal are all examples of issues that need to be addressed. The department in turn needs to handle sensitively the often conflicting needs of environmental protection and recreation, tourism and residential development along the coastal fringe.

Policies have been prepared, therefore, that seek to guide the development of the coast unit and to recommend a positive approach for the overall management of adjoining areas. In this way it is hoped to facilitate the provision of an integrated system of management for the entire coastal area that maximises the opportunities for development of visitor services, by the department and outside agencies, in a way compatible with the protection of its inherent values and the coastal experience.

Increased Visitation

Human impact on the coastal vegetation is clearly evident at Dolomite Point, where additional control is still required to keep people to tracks. Similar vegetation deterioration is occurring at the coastal end of Truman track, and will continue as use increases. The use of formed tracks and barriers at key points is therefore essential.

4.3 ISSUES ON THE KARST

The main issues in relation to karst and caves are protection of scientific, environmental, cultural and aesthetic values, public access, public safety, and adjacent land uses.

The biological and physical processes of the park's lowland karst ecosystems and associated caves combined with their vulnerability require sensitive, informed and pro-active management.

Karst Hydrology

Of particular importance is the quality of water flowing into or through the karst systems. Activities such as logging, clearance of vegetation, mining, quarrying, hydro-electrical installations, farming, roading, domestic and tourism development can potentially place karst systems under stress or cause irreversible damage.

Such activities within or adjoining the park may result in one or more of the following unacceptable impacts: increased sedimentation and siltation; disturbance of natural hydrological regimes; and chemical pollution of karst aquifers.

Little is conclusively known about the complex karst hydrology. If subterranean aquatic ecosystems are to be protected then catchment boundaries and karst hydrological linkages need to be investigated and mapped. This requires considerable research effort and will be encouraged throughout the term of the plan.

Increased Visitation

The public expectation of visiting caves is high. Very few safe and robust caves are currently known to exist in the park and controls are often controversial and difficult to enforce.

Uncontrolled tourism and recreational use of karst (including the Inland Pack Track) and caves will certainly cause unacceptable irreversible damage. Karst soil profiles are often very shallow and moist. The plant communities established in these soils and the soils themselves are vulnerable to destruction by trampling and ad hoc development.

Similarly the plants able to tolerate the low light environment in cave entrances and under overhangs are very sensitive to disturbance and quickly erode with trampling. This disturbance has already occurred in several caves.

It is now accepted that caves have no carrying capacity. Speleothems (cave decorations such as stalactites and stalagmites, crystal floors etc) are vulnerable to unintentional damage and vandalism. Cave fauna habitat (such as floor sediments and streamways, and aquatic substrates) once damaged or destroyed have little or no ability to regenerate to their original state. In respect of speleothems for example regeneration, if any, is within geological time-

frames (ie thousands of years).

Due to their fragile and vulnerable state controls on access and types of use will be necessary in caves. Where possible "robust" caves will be identified for general public inspection.

Over 30 named caves and cave systems have been identified within the park's karst, and many more undoubtedly remain to be discovered. The park is considered by recreational cavers as a significant part of one of the three main caving areas in New Zealand. The recreational caving opportunities presented by the park's karst and caves vary considerably in their degree of difficulty, challenge and danger.

With the exception of the Punakaiki Cavern (located immediately adjacent to SH6) and Ananui (Metro, Nile River) Cave (entry to which is currently controlled by permit) the most accessible and safest cave for general public inspection is the Fox River Tourist Cave.

Other caves and karst features which are potentially suitable for development for viewing by the general public are Cave Creek South, Cataract Pot and associated dolines, grykes and karren. These areas will be suitable for general public access once information systems, tracks, safety barriers and viewing platforms are established.

At present this landscape unit has only a limited degree of development with formed foot access avoiding the karst because it is difficult to traverse. Tracks have arisen along the most ready means of access, basically up the major river gorges - the Punakaiki, Pororari, Fox and Tiropahi River valleys and Bullock Creek. One issue is to give visitors a proper appreciation of surface karst terrain whilst protecting this fragile ecosystem. A balance has therefore been struck with the proposed development of a track in the Bullock Creek/Cave Creek South area, that interprets the impressive karst landforms and caves, whilst maintaining the northern portion of interstratal karst in its natural undeveloped state.

The potential exists for commercial guiding in caves, an opportunity which has partially been met by a temporary operation in Ananui Cave. This cave system is particularly suitable for interpretation and guiding for the general public providing sensible practices are adhered to. Subject to appropriate investigation and concept planning Ananui Cave is regarded as being suitable for development as a tourist cave. Generally, however, most caves in the park are not considered suitable for general public inspection.

Apart from protecting karst and caves from damage and inappropriate use there is the significant issue of controlling use for safety reasons.

Caves by their very nature are often dangerous for the inexperienced and many of the caves in the park are subject to rapid flooding. Experienced cavers belonging to recognised caving clubs can normally be expected to have a reasonable level of caving proficiency and, therefore, be more aware of the dangers to themselves and the environment. Management controls will, however, need to consider safety of the general public.

Caving is a specialist form of recreation and because recreational cavers explore, survey, map and document karst and caves as their major recreational interest they are generally more experienced in caving techniques than the general public. It is therefore not intended to inhibit or control their access other than in exceptional circumstances such as where access is restricted because a cave has exceptionally high scientific values or where it is awaiting classification. The Department of Conservation values the maps and information made available to it by cavers, and also values the close liaison with the New Zealand Speleological Society and its member clubs and groups.

Research

Fossil and sub-fossil sites are vulnerable to accidental damage by recreational cavers and the general public, and to intentional damage by vandalism. Sites are also at risk from 'curio' collecting by amateurs. In the past even scientists have made unnecessarily large collections for exhibits. There is a vital need, however, for bona fide research in respect of fossil and sub-fossil deposits in the park.

The absence of reliable knowledge in relation to cave and karst fauna is a serious impediment to developing appropriate policies and in situ management. However, it is known that cave fauna occur in low numbers and with low species diversity, and are particularly vulnerable to habitat modification.

Inland Pack Track

Inland the karst unit is traversed by the Inland Pack Track running from the Punakaiki River north to the Fox River. This is an historic track and, being over 100 years old, its management comes under the auspices of the Historic Places Act. Past maintenance has often been misguided and not in keeping with the protection of its historical features. Any development of the track in the future will have to take account of this historical significance. Upgrading prescriptions need to preserve and highlight historic remnants, and utilise design criteria in the reconstruction and interpretation that echo the historical aspects of the track. It is unnecessary at this time to provide huts along the track, but shelters will be considered and an upgraded campsite is proposed at Bullock Creek Farm.

Bullock Creek Farm

The general management of the Bullock Creek Farm is a major issue. Its location in the heart of the park warrants a management regime that is in keeping with the protection of the adjoining natural values. A separate, but compatible, management plan will therefore be prepared. An abridged version of the working draft was floated as an appendix to the draft of this plan. Submissions on the draft will be utilised in the finalisation of the Bullock Creek Farm Management Plan for its release for public comment.

4.4 ISSUES IN THE MOUNTAINS

Recreation Development

Pressure on the mountainous area of Paparoa National Park is currently not as great as on either of the other landscape units. This is due to fewer demands and therefore less opportunity for conflict. The rugged, wilderness quality, that has already been identified, in many aspects takes care of itself. However, in spite of this harsh and somewhat distant perception with which the area is regarded, it is a vulnerable landscape. Its management in the future is therefore no less deserving of considerable attention.

It is the very qualities of distance and wilderness that are most delicately balanced. Track development would intrude and downgrade the natural features being protected. Consequently, it is proposed to meet the opportunity for an alpine experience only by upgrading the existing access up Mount Bovis. This single development is envisaged to have "minimal" impacts on the more remote Paparoa tops.

It is recognised, however, that all alpine communities, and in particular cushion bogs, are extremely sensitive and care must be taken to avoid potential adverse impact.



policies



5.0 PREAMBLE

The policies in this section have been prepared in terms of the National Parks Act 1980 and the General Policy for National Parks. Where appropriate the nationally applicable General Policy has been interpreted and expanded in a Paparoa context. A list of the policies in the General Policy is included in Appendix 1 and these are cross-referenced in this section (e.g. GP #3).

It has also been necessary to utilise departmental policy, procedures and guidelines where they are consistent with national park principles, to provide guidance in a number of functional areas. At the time of publication of this plan the department had adopted guidelines for film and video concessions, and mining and prospecting. It has also prepared draft policies for cave and karst management, concessions and dogs. The utility of the latter policies is restricted due to their draft status and progress towards their completion will be monitored to check consistency with this plan. Variations requiring a major review of this plan will be notified publically in accordance with the Act.

In addition to these higher principles full consideration has been given to submissions made by the public and interested organisations at both the "intention to prepare the plan" and draft notification stages.

The policy framework is therefore the product of a many tiered process. The process is intended to synthesise a set of management policies that are applicable to Paparoa National Park from nationally established philosophies, as espoused in the Act and General Policy, and departmental functional policies. The steps in the process incorporated in earlier sections of this plan are the definition of management aims and objectives and the recognition of themes for landscape units. The description of these three aspects provides the philosophical basis for management decisions, particularly with respect to the resolution of conflicts as outlined in the previous management issues sections.

The policies are thus formulated to assist in the daily and long term management of the park by park managers and to assist the Board in its monitoring role.

1. The first part of the document is a list of the names of the persons who have been appointed to the various positions of the Board of Directors of the Corporation. The names are as follows:



5.1 PROTECTION

5.1.1 INDIGENOUS PLANTS AND ANIMALS

- * TO PRESERVE INDIGENOUS PLANTS AND ANIMALS AS FAR AS POSSIBLE IN THEIR NATURAL STATE;
- * TO MAINTAIN THE FUNCTIONAL INTEGRITY OF THE ECOSYSTEMS OF THE PARK;
- * TO RECOGNISE THAT IF REQUIRED, SPECIAL MEASURES WILL BE TAKEN TO PROTECT THREATENED SPECIES;
- * TO MANAGE SITES OF ECOLOGICAL IMPORTANCE TO HAVE AND KARST PLANTS AND ANIMALS IN ACCORDANCE WITH THE DEPARTMENT'S GENERAL POLICY AND GUIDELINES FOR CAVE AND KARST MANAGEMENT.

Explanation

The National Parks Act 1980 states that the preservation of native plants and animals is a prime requirement. Habitat maintenance is an integral part of this requirement (GP #8).

The ecosystems of Paparoa National Park can be defined as the interacting components of air, land, water, and living organisms of the park. Maintenance of the life supporting capacity and intrinsic values of the park requires conservation of the physical and biological processes as well as all the component parts of the park.

Specifically protected areas may be constituted in the park under Section 12 of the Act as outlined under Policy 5.1.12. Consent may be granted to allow the disturbance of indigenous plants and animals under Research Policy 5.1.13. The Minister of Conservation may authorise the taking of plants and animals where it can be demonstrated that it is for traditional Maori purposes as outlined in Policy 5.2.1.

Disturbance and damage of habitat can significantly reduce ecological values, particularly within caves. It is recognised that the overall ecology of the park is still poorly known. Research is essential for proper ecological management, and for improving the park's scientific data base. Thus, research aimed at benefitting management and understanding of the park will be encouraged (see Policy 5.1.13). The department's draft General Policy and Guidelines for Cave and Karst Management will be used as the basis for management to the extent that it is consistent with the Act and General Policy (see Policy 5.1.2).

5.1.2 CAVES AND KARST

- * TO MANAGE THE CAVES AND KARST OF THE PARK IN ACCORDANCE WITH THE DRAFT GENERAL POLICY AND GUIDELINES FOR CAVE AND KARST MANAGEMENT IN AREAS MANAGED BY THE DEPARTMENT OF CONSERVATION WHERE THIS IS CONSISTENT WITH THE PROTECTION OF NATIONAL PARK VALUES;
- * TO CLASSIFY THE CAVES AND KARST AREAS OF THE PARK FOR THE PURPOSES OF CONTROLLING ACCESS AND USE;
- * TO PREPARE DETAILED CONCEPT PLANS FOR INDIVIDUAL CAVES AND KARST AREAS THAT HAVE HIGH SCIENTIFIC, AESTHETIC OR CULTURAL VALUES, OR COULD BE UNACCEPTABLY DAMAGED BY UNCONTROLLED RECREATIONAL USE;
- * TO MAINTAIN THE CAVES AND KARST OF THE NORTHERN PORTION OF THE PAPAROA SYNCLINE AS FAR AS POSSIBLE IN THEIR NATURAL STATE;
- * TO GENERALLY PERMIT ONLY ONE CONCESSION PER CAVE SYSTEM.
- * TO ENCOURAGE RESEARCH ON CAVES AND KARST AS A PRIORITY.

Explanation

The caves and karst of the park should be managed according to accepted internationally and nationally consistent standards. The department's draft General Policy and Guidelines for Cave and Karst Management has been prepared to achieve this need for consistency. It has been adopted by the Authority as if it has been approved. The draft general policy and guidelines provide principles in such matters as protection of physical and natural features, and access to, interpretation, and use of caves and karst. It will be utilised to the extent that its provisions are in keeping with the National Parks Act and the General Policy. This will be interpreted in a conservancy context through the preparation of a West Coast Cave and Karst Management Strategy and Operational Guidelines. The West Coast strategy and guidelines will utilise the framework of the department's draft general policy and guidelines to implement the direction provided by this plan. It will classify the caves and karst areas for the purposes of access and protection (see Appendix 2) and provide guidelines for their management.

Caves, and in some cases sensitive karst features, are being degraded, or are potentially under threat of degradation, by uncontrolled recreational use. Classification and controlled access and use is an effective means of protecting at-risk features of scientific or aesthetic value.

Given that the demand for recreational and concession use is increasing rapidly it is considered that the preparation of individual cave and karst concept plans within two years is imperative. However, in the meantime it is recognised that recreational caving and concessions are a bona fide use of the park's karst resources where consistent with the General Policy and departmental policy. High priority will be given to preparing individual concept plans in respect of the following caves:-

- **Ananui (Metro/Nile River) Cave** is to be given first priority - High recreational use and an existing temporary concession; high, and at risk, biological, physical and aesthetic values. This cave system has a high public profile and access issues.
- **Bullock Creek-Cave Creek South System** - High geomorphological and biological values, liable to flash-flood, and dangerous to the general public and experienced cavers. Bullock Creek system entrances, adjacent to Bullock Creek access road, can be affected by farm management regimes (Bullock Creek Farm) and upstream inputs of fertilizers, herbicides and gravel.
- **Babylon Cave** - Moderately high recreational use; high physical, biological and aesthetic values which are at risk. Located adjacent to a high use track.
- **Fox River Caves** - The 'tourist' cave has high public use and potentially at risk physical and aesthetic values. Deep rifts and rock-falls render the river cave potentially dangerous to the general public.
- **Armageddon** - Hydrologically related to Fox River Cave, and also with Cave Creek North which is to be managed in its natural state. Has significant cave wilderness values.

The northern part of the park between the Fox and Tiropahi Rivers is the largest area of unmodified karst in the Barrytown Syncline and constitutes a superb example of lowland polygonal karst in a natural forested environment. It represents a nationally significant example exhibiting most features found in this type of karst. There are sinking and resurging streams, huge collapsed dolines, grykes, numerous solution dolines, significant examples of karren and numerous caves including some that are very large and spectacular. Recreational and other developments will unacceptably impact on these values. This area, therefore, will be managed in such a manner as to maintain it as far as possible in its natural (wilderness) state. Development will be minimal and shall be confined to management needs to protect any high scientific and aesthetic values associated with the caves or specific karst localities within the area.

With growing public expectation for cave experience, and a general increase in the park's popularity, demand for cave guiding concessions and consequently the number of clientele are likely to increase significantly. Potentially, if poorly managed, cave guiding concessions are likely to cause the most significant recreational impacts on caves. The most effective means of management and protection is, therefore, to permit not more than one operator in each cave, although their concession may apply to several caves. Exceptions will be made for Fox River Tourist Cave and Punakaiki Cavern which historically have been open for general public access. These caves have high visitation and require no particular expertise. It is not anticipated that extra concessions will increase visitation.

Potential concessionaires will be expected to show a high degree of competency in respect of recreational caving techniques and skills, safety and cave conservation relative to the degree of difficulty and values of the cave or caves for which the concession is sought (see Policy 5.2.17).

5.1.3 NGAI TAHU INTERESTS

- * TO RECOGNISE THE TINO RANGATIRATANGA AND MANAWHENUA OF POUTINI-NGAI TAHU FOR THE AREA;
- * TO RECOGNISE THE SPIRITUAL, HISTORICAL AND CULTURAL SIGNIFICANCE OF THE AREA THAT IS NOW PAPAROA NATIONAL PARK TO THE TREATY PARTNER NGAI TAHU AND TO GIVE RECOGNITION TO THIS SIGNIFICANCE IN MANAGEMENT OF THE PARK;
- * TO SEEK AND GIVE EFFECT TO THE ADVICE OF POUTINI-NGAI TAHU ON ALL MATTERS OF THEIR CONCERN IN KEEPING WITH THE PRINCIPLES OF THE TREATY OF WAITANGI.

Explanation

The department recognises that the Crown's Treaty partner Ngai Tahu have a long association with the area that is now Paparoa National Park and its spiritual significance to Maori will be reflected in park management. Through the provisions of this management plan, within the limits of legislation, the department will endeavour to preserve and uphold the manawhenua and tino rangatiratanga of Poutini-Ngai Tahu. Management of the park will be undertaken through a three-way partnership - the department, the conservation board and Poutini-Ngai Tahu. Matters of concern to Poutini-Ngai Tahu may include the identification and protection of historic sites (see Policy 5.1.5), management of park waters (see Policy 5.1.11), traditional resource use (see Policy 5.2.1) interpretation (see Policy 5.2.3) and the general care of the spiritual well-being of the Paparoa area. However, this is not an exhaustive list and this Ngai Tahu Interests policy is a general empowering clause that ensures Maori values are recognised in all aspects of park management.

5.1.4 BOUNDARIES

- * TO IDENTIFY LANDS ADJACENT TO THE PARK WHICH MAY WARRANT INCLUSION IN THE PARK AND TO EVALUATE THESE IN TERMS OF THE CRITERIA IN THE GENERAL POLICY FOR NATIONAL PARKS;
- * TO SEEK THE ACQUISITION OR PROTECTION OF THOSE AREAS IDENTIFIED FOR INCLUSION IN THE PARK;
- * TO ACHIEVE BOUNDARIES IN TERMS OF THE GENERAL POLICY FOR NATIONAL PARKS;
- * TO SEEK THE ADDITION OF THE FORESHORE AND UNALLOCATED CROWN LAND BEDS OF RIVERS TO THE PARK.

Explanation

Major additions to the park must comply with the criteria set out in the National Parks Act 1980 (GP #7). They must contain scenery of such distinctive quality, ecological systems or natural features so beautiful, unique or scientifically important that their preservation is in the national interest. Additions to the park other than for the improvement of the location of boundaries are subject to the public participation procedures of the National Parks Act 1980.

After appropriate consideration by the department, the Board, the Authority and Poutini-Ngai Tahu and consultation with the West Coast Regional Council and Transit NZ (as appropriate), areas may be added to the park to achieve more manageable boundaries. Land already within park boundaries, which does not conform to the Authority's criteria, and which could be managed more appropriately under a different status may be considered for exclusion from the national park.

A comprehensive examination of the park boundary is underway to identify minor alterations which will rationalise the boundary. In general this includes both small additions to and small deletions from the present park area and is being done in sections. The department and Transit NZ will seek to rationalise the State Highway 6 road reserve (see Policy 5.3.7). Also, a number of small areas that received approval to become national park were omitted at the time of the park's gazettal in 1987 for technical reasons. The department is in the process of adding these areas to the park. Several rivers within the park boundaries have beds of Unallocated Crown Land. Allocation of such Crown land to the Department and its addition to the park will be sought in conjunction with the Department of Lands.

Several habitat types or natural features have already been recognised as being deficient within the protected natural area system of the Punakaiki Ecological District. Areas required to improve representativeness may be appropriate as additions to the park. Caves and karst features of national and regional significance, wetlands and granite landforms should ideally be included. Existing or potential habitat for Westland petrel colony will continually require protection. The ecological sequence from mountains to sea is often interrupted in the coastal area. Coastal ecosystems are particularly under represented in the park and potential additions will be investigated. These will include such areas as the Nikau Scenic Reserve, Seal Island and Kaipakati Point.

The addition of foreshore areas will be sought because they are part of the ecological sequence from mountains to sea and are required to ensure adequate representativeness and for effective park management.

Pingao, for example, does not occur in the park, but plants are present on sand dunes in the adjacent Pororari River estuary, and in Nikau Scenic Reserve. Given the rapidly diminishing range of this species in New Zealand the department and Poutini-Ngai Tahu will look at the practicalities of restoring pingao on these dunes, and adding them to the park.

The potential for the creation of marine reserves, and taiapure (in conjunction with Poutini-Ngai Tahu), offshore at Paparoa is being investigated separately by the department. Such protection of contiguous marine areas raises exciting possibilities for holistic conservation management.

5.1.5 ARCHAEOLOGICAL AND HISTORIC SITES

- * TO RECOGNISE THE TINO RANGATIRATANGA OF POUTINI-NGAI TAHU ON ALL ASPECTS OF PROTECTION, RESEARCH, INTER-PRETATION, AND WHERE APPLICABLE, PUBLICATION OF SITES AND ARTEFACTS SIGNIFICANT TO MAORI;
- * TO PROTECT ARCHAEOLOGICAL SITES, TRADITIONAL SITES AND HISTORICAL FEATURES AND CO-ORDINATE FURTHER INVESTIGATIONS AND INTERPRETATION OF HISTORIC PLACES IN LIAISON WITH THE NEW ZEALAND HISTORIC PLACES TRUST AND, IN THE CASE OF PRE-EUROPEAN SITES, POUTINI-NGAI TAHU;
- * TO UNDERTAKE A SURVEY, AND COMPILE AN INVENTORY, OF HISTORIC PLACES IN THE PARK;
- * TO ENCOURAGE RESEARCH INTO THE NATURE OF HUMAN SETTLEMENT OF THE PAPAROA AREA;
- * TO INVESTIGATE THE ESTABLISHMENT OF AN APPROPRIATE DISPLAY FACILITY FOR THE PROTECTION AND INTERPRETATION OF ARTEFACTS AND ANTIQUITIES;
- * TO ENCOURAGE THE RETURN OF ARTEFACTS AND ANTIQUITIES PREVIOUSLY REMOVED FROM THE PARK AREA.

Explanation

This policy refers to all archaeological, traditional and historic sites as defined by Section 2 of the Historic Places Act 1980 (GP #17) and to artefacts and antiquities as defined in the Antiquities Act 1975 (the latter is currently under review).

Many historic sites are known in this area, but there have been no systematic field surveys of historic features and no in depth research.

Unauthorised collection of artefacts and antiquities or excavation of archaeological and historic sites is prohibited. Only sites or features capable of adequate protection will be identified and displayed to the public consistent with the provisions of the Historic Places Act 1980.

As sites and artefacts of spiritual significance to Poutini-Ngai Tahu belong to the iwi the department will only act in accordance with their wishes. The department will work closely with Poutini-Ngai Tahu and other appropriate bodies to ensure the protection and sensitive interpretation of such sites and artefacts (see Policy 5.1.3). A set of protocols will be developed with Poutini-Ngai Tahu for any excavations involving or revealing sites or artefacts of significance to Maori.

The collecting of artefacts from sites throughout the park area has regularly occurred in the past. With the advent of Paparoa National Park it is considered appropriate that people and agencies holding such collections be encouraged to lodge the material with the park. The potential to develop a museum, or other similar means of display in the Paparoa area will be investigated to facilitate the receiving of the artefacts. The West Coast Conservancy Office is a registered collector pursuant to the Antiquities Act.

5.1.6 FOSSILS AND SUB-FOSSILS

- * TO PROTECT FOSSIL AND SUB-FOSSIL SITES THROUGHOUT THE PARK;
- * TO ENCOURAGE RESEARCH ON FOSSIL AND SUB-FOSSILS AS A PRIORITY.

Explanation

Some of the sedimentary rocks of the park contain fossils of marine origin including corals, sponges, echinoderms, molluscs, barnacles, fish, crabs, penguin and whale bones. Sub-fossil deposits exist in many of the limestone caves, tomo and overhangs and contain an evidential record of the past birdlife of the park.

Fossils and sub-fossils of aesthetic value form a more limited resource than those of scientific value. This value is more easily compromised by visitation although disturbance or damage to fossils and sub-fossil deposits will destroy or reduce both their scientific and aesthetic value.

Studies of palaeobotany (fossil plants), palynology (fossil spores and pollen), and palaeontology (fossil animals) are useful, however, for cave management and improving scientific information and understanding. Fossils are used as stratigraphic indicators, climatic indicators, evidence of changing biogeographic patterns and records of prehistoric life and evolution. Bona fide scientific research will be encouraged to improve the knowledge of the fossils and sub-fossils and will be conducted in accordance with the department's Draft General Policy and Guidelines for Cave and Karst Management.

In general the preference is to leave fossil material in situ unless it is at risk and a permit allowing removal has been obtained from the Department of Conservation.

The Draft General Policy and Guidelines for Cave and Karst Management, and the General Policy for National Parks currently provide for the collection of fossils and sub-fossils, as well as geological specimens and soil samples. Collection of specimens can be authorised for scientific research or other purposes beneficial to park management. An amendment to the Act is being sought to clarify the specimen collection provisions.

In addition to any other conditions that may be placed on permits granted for the collection of fossil and sub-fossil material, the following conditions will apply:

- after research is completed, specimens must be lodged with a recognised research or educational institution in New Zealand (such as the National Museum, regional museums, Crown research agencies, and universities); and

- the Director-General of Conservation must be informed in writing of the lodgement; and
- the specimens must be registered on the New Zealand Fossil Record File maintained by the Geological Society of New Zealand; and
- research results, including reference to the New Zealand Fossil Record File number(s), must be sent to the Director-General of Conservation (marked Attn: Director Science and Research);

and in general

- specimens will remain the property of the Crown, unless extenuating circumstances require a transfer of ownership.

Researchers are requested to acknowledge in any publication of results that they obtained permits to carry out their work from the Department of Conservation.

5.1.7 INTRODUCED PLANTS

- * TO ERADICATE AS FAR AS POSSIBLE ALL INTRODUCED PLANTS;
- * TO PROHIBIT THE INTRODUCTION OF ANY SPECIES NOT NATIVE TO THE PARK OR ITS ENVIRONS, WITH THE EXCEPTION OF BIO-CONTROL AGENTS, APPROVED BY THE AUTHORITY;
- * TO FOSTER THE COOPERATION OF LOCAL AUTHORITIES AND ADJACENT LANDOWNERS TO CONTROL PLANTS WHICH THREATEN INDIGENOUS PLANT COMMUNITIES.

Explanation

National parks are areas for the protection of native species and the National Parks Act 1980 requires that all introduced species be eradicated. Introduced plants also erode the mana of indigenous species and collectively the mana of Ngai Tahu. However, as it is rarely possible or practical to carry out total eradication the department undertakes containment programmes (GP #9). Priority will be given to the control of introduced species where they are likely to have a detrimental effect on the natural indigenous features of the park. Succession to indigenous communities may be the best means of eradication and control will not be attempted if it is likely to interfere with this process. Control will also recognise the role weeds may play in reducing erosion.

Most of the naturalised plants of the park are confined to the coastal fringe and major river valleys. Gorse, wild ginger, German ivy, ragwort and jointed rush are considered to be the most serious threat to the natural plant communities and should be exterminated or controlled. Particular attention will be paid to weed control on Bullock Creek Farm and in Fox River.

The park could also be invaded by weeds from private lands where there are common boundaries. The co-operation of land owners and the local bodies will be required to ensure this threat is minimised (see Policy 5.3.6).

The effect noxious weeds in the park could have on neighbouring farm land and rivers is also recognised. Periodic surveys will be undertaken as considered necessary, to locate new introductions or the spread of noxious weeds within the park. In addition programmes will be undertaken to reduce and where possible eradicate weeds. This will include aquatic weeds.

It is proposed to liaise with agencies concerned with weed control to evaluate the effects of the weeds and techniques for their eradication. Weed control operations will be monitored and reviewed in the light of information on progress.

Knowledge of the means by which new areas are infested is important for management and control of weeds. Flooding in karst areas contributes to the spread of ragwort and possibly gorse. Animals (mainly goats), are responsible for the spread of burdock and possibly other species like gorse. Birds are mainly responsible for the spread of Cotoneaster and blackberry, wind the spread of ragwort and thistle species, and possums the spread of banana passionfruit. German ivy, wandering willy and marram grass spread by vegetative reproduction.

Past control methods include chemical spraying, cutting and hand-pulling. Chemical means of eradication will be permitted when no effective alternatives are available. The Authority has concluded that it supports the use of bio-control means as a control option but its use requires changes to the General Policy. Bio-control may be investigated if demanded by circumstances (see Policy 5.1.8). It is important that control is not excessive in order to minimise impact on native vegetation. There are no recognised, selective sprays specific to German ivy and wandering willy so these species together with jointed rush, by virtue of its location, can only effectively be controlled by very labour intensive hand-pulling. Pulled material must be treated to stop re-rooting in those species that reproduce vegetatively. Revegetation may be necessary after weed control, to facilitate site restoration and prevent reintroductions of weed species.

Vigilance should be maintained to ensure no new exotic species become established. Clematis vitalba infestations, for example, at Barrytown and in the Buller Gorge pose a threat requiring monitoring and active control. The department will also seek to have Cotoneaster trees in Punakaiki village removed.

5.1.8 INTRODUCED ANIMALS

- * TO ERADICATE AS FAR AS POSSIBLE ALL INTRODUCED ANIMALS;
- * TO ACTIVELY ENCOURAGE THE EXTERMINATION OF INTRODUCED ANIMALS IN AND ADJACENT TO THE PARK BY RECREATIONAL AND COMMERCIAL HUNTERS;
- * TO MONITOR THE IMPACTS OF INTRODUCED ANIMALS ON INDIGENOUS PLANTS AND ANIMALS OF THE PARK;
- * TO PROHIBIT THE INTRODUCTION OF ANY ANIMAL SPECIES NOT NATIVE TO THE PARK OR ITS ENVIRONS, WITH THE EXCEPTION OF APPROVED BIOLOGICAL CONTROL AGENTS APPROVED BY THE AUTHORITY;
- * TO NOT PERMIT RELEASES OF INTRODUCED FISH INTO PARK WATERS;
- * TO PREVENT INTRODUCED FISH SPECIES BECOMING ESTABLISHED IN THE UPPER BULLOCK CREEK CATCHMENT.

Explanation

Control operations for wild animals are carried out in accordance with Wild Animal Control Plans prepared by the department under the Wild Animal Control Act 1977. In the interim, pending preparation of the plans, wild animals will still be subject to control operations as deemed necessary.

The value of recreational and commercial hunting and trapping as a control measure for all undesirable animals is recognised and permits will be issued to encourage these activities, provided they are carried out without danger to native plants and animals or park visitors (see Policy 5.2.15). The department may undertake control programmes for undesirable animals on its own behalf.

Introduced animals are destructive of Maori values. Control operations and any rehabilitation of native habitat adversely effected by introduced animals helps to restore the mana of sites and species of significance to Poutini-Ngai Tahu.

Biological control may provide an effective and efficient option for introduced plant and animal control within the park. The release of biocontrol agents is not currently allowed by the General Policy for National Parks. Changes to the General Policy to allow bio-control will be investigated if demanded by circumstances. It is also recognised that these agents will be likely to reach and spread into the park from adjacent land.

Goats have little commercial value and are not greatly sought by recreational hunters. However, in Paparoa National Park, goats are the most hunted animals by virtue of their relative abundance. The impact they have on the native plants of the park is significant and in the long term they degrade forest structure and composition and restrict the revegetation of denuded areas. Any control management will be a direct burden on the department. Extermination is not considered to be a practical option, but long term control of density is feasible. Densities, determined through research programmes (see Policy 5.1.13), will be set at levels where there is no appreciable impact on indigenous plants. Exclosure plots will be used to monitor vegetation response to an absence of browsing animals. The results will indicate the natural species composition that management must aim for throughout the park.

Possums impact on indigenous plants and compete with some bird species for food and habitat requirements. Extermination is probably not possible, but control to low density levels could be achieved with available technical ability and, where appropriate, financial incentives. A long term commitment to monitoring and population control is necessary.

The combination of goats and possums is considered to be the most serious threat to the Paparoa National Park. The control of these two animals is to be the highest priority for park management. The department has already initiated intensive goat and possum control programmes.

Mammal predators have an unmeasured but potentially severe impact, particularly on native bird populations. Feral cats, for example, are considered a serious threat to the Westland petrel, little blue penguin and other native birds. Control is difficult and would need to be site specific rather than an overall park objective. The Westland petrel colony is one area where intensive and long term control of predators will be required. Appropriate methods will be developed to control cats and mustelids.

Commercial recovery through aerial hunting and trapping, is regarded as the principal management tool for control of red deer populations. Although deer numbers are low in the park it is expected that licensed helicopters will maintain irregular search operations.

A small population of chamois exists in the north of the park. They currently have minimal impact on park values and eradication is not warranted. The herd will be monitored and the justification for eradication kept under review.

The use of poison baits to kill introduced animals will be considered as a management tool. The danger to native animals of poisoning can be minimised by careful design of control programmes. Monitoring of non-target species would be necessary.

Vegetation and native animal surveys will be undertaken from time to time to determine trends in vegetation condition and native animal populations, to identify priority areas for control of introduced animals and to identify required expenditure on operations to reduce their populations.

Wasps are present in the park and its environs and are expected to increase over the next few years. They are a nuisance to park visitors and impact adversely on ecological processes. Wasps can be controlled in small specific areas by poisoning, but long term control will depend on the success of biological control agents.

Section 4(2)(b) of the Act and the General Policy (GP #11) requires that park waters are kept as free as possible from introduced (fish) species. The sports fishery of the park is not a significant recreation resource, so it is not appropriate that introduced fish be released.

The cave systems in Bullock Creek act as a natural barrier to sports fish. Introduced fish have not been recorded in the Upper Bullock Creek catchment. It is considered that this is an important scientific feature of the creek and therefore no exotic fish will be introduced.

5.1.9 DOMESTIC ANIMALS

- * TO EXCLUDE, WHERE PRACTICABLE, ALL DOMESTIC ANIMALS FROM THE PARK WITH THE EXCEPTION, UNDER STRICT CONTROLS, OF:
 - GUIDE DOGS (CERTIFIED BY THE ROYAL NZ FOUNDATION FOR THE BLIND),
 - SPECIALLY TRAINED DOGS FOR PARK MANAGEMENT PURPOSES.

Explanation

Domestic animals have considerable potentiality to modify or adversely affect indigenous plants and animals. Kiwi and weka, for example, are particularly at risk from stray dogs. With the exception of guide dogs for blind persons, all domestic animals and pets are normally prohibited from national parks (GP #10). Domestic stock will not be allowed in the park as there is no traditional use of this land and no land suitable for grazing (see Policy 5.2.23).

If stray domestic animals are found within the park every attempt will be made to identify the owner and have them removed forthwith. If animals are found persistently within the park boundaries, after due warning to the owners if known, the animals will be dealt with in accordance with S62 of the National Parks Act, 1980.

In accordance with the draft Department of Conservation Policy on Dogs, no dogs, other than guide dogs, will be allowed in the park without specific authorisation, usually by means of a permit. Those trained for management purposes including search and rescue, or protected species management will be permitted. Dogs intended for use by recreational hunters will only be allowed in exceptional circumstances at the discretion of the Regional Conservator. Hunters are not normally authorised to take dogs, because the park is a sensitive area for kiwi and dogs are of only limited use in the kinds of recreational hunting undertaken (see Policy 5.2.15).

All dogs entering the park should be registered and comply with the Dog Control and Hydatids Regulations (1985) or their equivalent as they are currently under review. Dog control officers or dog rangers may require to see current certificates for hydatids treatment or exemption.

The use of horses and other pack animals in the park is prohibited, because of their general incompatibility with park values, ability to spoil tracks, damage indigenous vegetation, spread noxious weeds and create conflict with other park visitors.

5.1.10 FIRE CONTROL

- * TO PREVENT AND EXTINGUISH WILD FIRES IN THE PARK;
- * TO ENSURE THAT STAFF ARE TRAINED IN FIRE CONTROL PROCEDURES AND THAT FIRE FIGHTING EQUIPMENT IS PROVIDED AT PUNAKAIKI FIELD CENTRE;
- * TO NOT PERMIT THE LIGHTING OF FIRES IN THE OPEN DURING A PROHIBITED FIRE SEASON, AS REQUIRED BY THE FOREST AND RURAL FIRES ACT 1977;
- * TO RESTRICT THE USE OF BILLY FIRES WITHIN THE PARK AND TO PROMOTE THE USE OF PORTABLE STOVES THROUGHOUT THE PARK;
- * TO PROMOTE PUBLIC AWARENESS OF FIRE PREVENTION AND THE NEED TO CONSERVE NATIVE PLANTS;
- * TO COOPERATE WITH AND ASSIST THE APPROPRIATE FIRE AUTHORITIES IN THE PREVENTION AND CONTROL OF FIRES ADJACENT TO THE PARK.

Explanation

The Department of Conservation is responsible for fire control in the park and within 1 km of the boundaries of the park in accordance with the Forest and Rural Fires Act 1977. The department produces fire plans which are revised annually. These fire plans detail the fire fighting equipment available and procedures to be followed in the event of a fire in and adjoining the park. The area of Paparoa National Park is covered by the West Coast Regional and Buller District Fire Plans.

The department will provide initial response fire-fighting equipment at Punakaiki.

Fires are allowed subject to the above policies and to the General Policy (GP #14). The department will discourage the use of "billy fires" (as defined by the Forest and Rural Fire Regulations 1979) and promote the use of portable stoves in the park. There is a need to progressively re-educate visitors in order to discourage the use of native trees as fuel. Billy fires will not be allowed above any point 300m below the bushline. They will also only be allowed in approved fireplaces within 300m of any path or track within the park.

The lighting of fires in the park will be controlled by park bylaws which are enforced by the department's staff. In the case of fire, assistance to the appropriate fire fighting authorities will be given priority over all other activities, with the exception of search and rescue, and where life is endangered.

5.1.11 SOIL AND WATER

- * TO RECOGNISE WATER AS A TAONGA IN ITS OWN RIGHT AND TO ACKNOWLEDGE THE TRADITIONAL NGAI TAHU STATES OF WATER;
- * TO PREVENT ACTIVITIES OR DEVELOPMENTS WHICH MAY SIGNIFICANTLY ADVERSELY AFFECT SOIL STABILITY OR QUALITY AND QUANTITY OF WATER IN THE PARK;
- * TO ADVOCATE LAND-USE PRACTICES ADJOINING THE PARK WHICH DO NOT COMPROMISE THE NATURAL VALUES OF PARK WATERS OR SOIL AND WATER CONSERVATION VALUES;
- * TO ENCOURAGE THE WEST COAST REGIONAL COUNCIL TO RECOGNISE AND PROTECT THE SPIRITUAL SIGNIFICANCE OF WATER AND ITS HIGH NATURAL QUALITY THROUGH IMPLEMENTATION OF THE APPROPRIATE WATER QUALITY CLASSIFICATION STANDARDS UNDER THE RESOURCE MANAGEMENT ACT;
- * TO LIAISE WITH WEST COAST REGIONAL COUNCIL TO ENSURE THAT SOIL AND WATER VALUES ARE PROTECTED OR ENHANCED IN AND ADJOINING THE PARK.

Explanation

Fresh and salt waters are acknowledged as part of Te Wai Katoa (the endless waters) from the origins of the Maori concept of Te Taiao. Water is a tupuna taonga of Ngai Tahu and their tino rangatiratanga is recognised by the department in terms of the Second Article of the Treaty of Waitangi.

Water contains a mauri that must be respected and cared for. Traditionally, Ngai Tahu recognise states of water through a traditional system which applies to all waters within the tribal rohe (area of Ngai Tahu rangatiratanga and manawhenua) regardless of legal boundaries. This management plan recognises the continuity of park waters with waters outside the park. In conjunction with Poutini-Ngai Tahu park waters will be categorised using the following traditional states which will form the basis for all management practices:

- **Waiora** - The purest form of water with the potential to sustain the well-being of all things and to counteract evil. Its purity remains only if contact with people is protected by karakia.
- **Waimaori** - Ordinary, clean water, with no sacred associations after it has come into unprotected contact with people.
- **Waikino** - Water that has been polluted or debased. It has an altered mauri that can potentially cause harm to anyone.
- **Waimate** - Water so damaged that its mauri has gone and there is potential to cause ill-fortune for all living and spiritual things.
- **Waitai** - Water of the sea and surf in the realm of Takaroa.

The high natural clarity, under normal conditions, of the waters of the park thus hold great spiritual significance to Maori. The need to protect this quality from any excessively adverse impacts of operations such as mining (see Policy 5.2.24) and shingle and rock removal (see Policy 5.2.25) is concordant with the requirements of more general soil and water conservation (GP #13).

Karst aquifers and river systems are highly sensitive to surface disturbance and water pollution. The highly permeable nature of the ground water systems permit pollutants (including silt, chemicals and sewage) to move rapidly throughout the hydrological network. Pollutants would seriously degrade water quality and are potentially disastrous to the unique subterranean animals present in the caves. Research into the complex karst hydrology will be encouraged (see Policy 5.1.13).

The West Coast Regional Council's responsibilities for resource management are of prime importance in protection of the park's soil and water values. The department will support the council in its efforts to control land-use practices adjoining the park, at statutory hearings, through submissions, and on an informal basis. The Council will also be encouraged to classify the waters of the park, as provided for in Section 59 of the Resource Management Act 1991, in a way which recognises and seeks to protect their high spiritual significance and natural quality and quantity.

Control of introduced animals within and adjoining the park to a level that allows regeneration of the vegetation is essential if soil and water values are to be maintained in the park (see Policy 5.1.8 Introduced Animals).

No provision has been made for any structures or occupations of waterways, but applications will be treated on their merits. Any possible requirements under the Harbours Act 1950 and Resource Management Act and will be investigated as required.

The inter-tidal zone adjacent to sections of the park's western boundary is a continuation of the mountains to the sea sequence of ecosystems. It is ecologically important that this area is managed in such a way as to not detrimentally affect the sensitive coastal fringes of the park (see Policies 5.1.4 Boundaries, and 5.3.6 Adjacent Use).

5.1.12 WESTLAND PETREL SPECIAL AREA

- * TO ESTABLISH AND MAINTAIN A SPECIALLY PROTECTED AREA OVER THE NESTING COLONY OF THE WESTLAND PETREL;
- * TO PREPARE AND IMPLEMENT MANAGEMENT GUIDELINES FOR THE WESTLAND PETREL SPECIAL AREA AND TO LIAISE WITH OTHER LANDOWNERS TO ENCOURAGE COMPATIBLE MANAGEMENT OF PETREL COLONY AREAS OUTSIDE THE PARK;
- * TO CONSULT CLOSELY WITH THE ROYAL NZ FOREST & BIRD PROTECTION SOCIETY IN THE PREPARATION OF THE GUIDELINES.

Explanation

The National Parks Act 1980 makes provision for the setting apart particularly distinctive areas of park as specially protected areas, wilderness areas and amenity areas. The Act also provides some guidance for the management of these types of areas (GP #6).

In order to protect the only breeding habitat of the Westland petrel (Procellaria westlandica) it is necessary to restrict public access to the colony, as burrows are located in soft earth and are easily trampled. The nesting colony has therefore been identified as an area within the park warranting the highly protective status of specially protected area. The colony will be referred to as the Westland Petrel Special Area.

As of 1991 about 70% of the breeding colony lies within the park, with another 20% or so on land owned by the Royal NZ Forest & Bird Protection Society. Any strategy for the management of the colony within the park must include reference to adjacent areas outside it, and it is highly desirable that a cooperative, consultative relationship with the Society be established.

It is recognised that petrels hold a fascination to the public, especially the incoming birds after twilight and at dawn when they are leaving the colony. However, disturbance by humans through uncontrolled access would adversely affect the colony. A viewing platform (not necessarily in the special area) would satisfy most of the public's curiosity and help with the interpretation of this distinctive species.

5.1.13 RESEARCH

- * TO PROMOTE RESEARCH IN SUPPORT OF THE LONG TERM MANAGEMENT OBJECTIVES FOR THE PARK;
- * TO ALLOW RESEARCH WITHOUT DIRECT MANAGEMENT BENEFITS THAT DOES NOT DETRACT FROM THE PROTECTION OF NATIONAL PARK VALUES;
- * TO PREPARE A RESEARCH, SURVEY AND MONITORING STRATEGY FOR PAPAROA NATIONAL PARK;
- * TO PERMIT THE TAKING OF SPECIMENS FOR SCIENTIFIC OR EDUCATIONAL PURPOSES ONLY WITH THE WRITTEN PERMISSION OF THE REGIONAL CONSERVATOR;
- * TO LIAISE WITH RESEARCH AGENCIES LIKELY TO UNDERTAKE RESEARCH OF BENEFIT TO THE PROTECTION AND MANAGEMENT OF THE PARK.

Explanation

Survey, monitoring and research should be encouraged in order that managers and visitors gain a fuller understanding of the park, its natural, physical, cultural and historical features and public use patterns and needs (GP #15). Future survey, monitoring and research objectives are listed below. This would enable management strategies and priorities to be based on sound scientific evidence so that all decisions were environmentally sustainable and properly monitored. The department will ensure that appropriate survey and research efforts are coordinated and undertaken to fulfil the long term management needs of the park.

However, other research, not funded by the department or without obvious management benefits, should not be discouraged. Any well planned and reported research carried out in the park may well prove valuable in future park management. Where, however, the proposed research is likely to negatively impact on the sustainability of indigenous ecosystems, it will be directed to areas outside the park.

Research will only be allowed to proceed with the prior written approval of the Regional Conservator who may impose conditions. The Regional Conservator may seek scientific advice on the suitability of any proposed research, and this will be facilitated by the Conservancy Advisory Scientist. Consultation with Poutini-Ngai Tahu may also be required (see Policy 5.1.3). Approval of research activity will be dependent on the assured protection of the ecosystems to be studied. There must be no lasting changes to indigenous plant and animal populations or to their ecological relationships.

Researchers will be required to provide the department and the conservation board with at least two copies of all reports and other published information within an agreed time of the completion of the practical work.

Research, survey and monitoring will be carefully planned to fulfil a stated objective and purpose. Any monitoring that is undertaken will be carried out consistently for a sufficient time to meet these objectives. Monitoring for the sake of an established routine is not sufficient justification to continue indefinitely. To this end a research, survey and monitoring strategy will be prepared by the conservancy within two years of this management plan coming into operation. This strategy will set in place guidelines, priorities and criteria against which potential projects will be measured.

The collection of samples (plants, animals, rock, etc) will not normally be encouraged within Paparoa National Park. Any requests for the collection of specimens must be made in writing to the Regional Conservator. Generally, permits will only be issued for species not found elsewhere. Permits allowing collection of specimens may then be issued for proven bona fide scientific or educational purposes. Collection of terrestrial invertebrates will be in terms of the Collecting Code of the NZ Entomological Society.

Survey and monitoring currently undertaken within, or related to, the park includes:

- Daily weather records, part of national weather recording network for the Meteorological Service. These records include daily maximum/minimum, dry bulb/wet bulb (humidity), and grass maximum/minimum temperatures; rainfall; solar radiation; and wind direction and strength.
- Rainfall records at Bullock Creek, Upper Bullock Creek and Mt Bovis.
- Wave direction/height/frequency, and erosion monitoring at Pororari Beach.
- Beach profile records at Pororari Beach (periodically).
- Westland petrel, population and breeding (including banding), study by National Museum.
- Westland petrel, flight observations.
- Monitoring vegetation plots.
- Goat survey.

The following broad areas are recognised as warranting further survey and monitoring:

- Inventory of park resources especially:
 - i) uncommon and threatened plants particularly in the coastal and alpine areas.
 - ii) coastal resources.
 - iii) cave fauna.
 - iv) fossils and sub-fossils.
 - v) archaeological sites.
 - vi) invertebrate fauna.

- Monitoring of visitor use and impacts to enable development of a system to identify and manage the limits of acceptable change for:
 - i) introduced plants.
 - ii) introduced animals e.g. possums, goats, chamois, mustelids.
 - iii) the farming of Bullock Creek.
 - iv) Dolomite Point rock formations.
 - v) cave tourism and recreational caving.
 - vi) park visitors.

A doctoral research project on the karst hydrology and geomorphology of the Bullock Creek/Cave Creek South system is currently being funded by the department through the University of Auckland, Geography Department. It is desirable that similar research is undertaken for the entire park.

The following are recognised as the broad areas requiring further research:-

- classification of ecosystems in the park.
- special management techniques for:
 - i) plant and animal control.
 - ii) threatened/protected species management.
- understanding park ecosystems (especially cave and groundwater ecosystems).
- interpretation of historical and archaeological records.
- karst hydrology and geomorphology.
- Westland petrel.
- Bird migration patterns.
- cost/benefit analysis of the park in the economy of the West Coast.

The above lists are neither exhaustive nor complete. Research, survey and monitoring requirements will always be kept under review to reflect changing park management needs.

5.2 PUBLIC USE

5.2.1 NGAI TAHU TRADITIONAL USE

- * TO SUPPORT WHERE THERE IS PRIOR APPROVAL, AND WITH APPROPRIATE CONTROLS, THE TRADITIONAL USES OF INDIGENOUS PLANTS AND ANIMALS BY MAORI FOR CULTURAL PURPOSES, PROVIDED THE PARTICULAR SPECIES ARE NOT RARE, ENDANGERED OR OTHERWISE PROTECTED, THE DEMANDS ARE NOT CONSIDERED EXCESSIVE, THE PLANTS OR ANIMALS ARE FOR NON-COMMERCIAL USE AND THERE ARE NO ALTERNATIVE SOURCES AVAILABLE FROM LANDS OUTSIDE THE PARK;
- * TO SEEK AND GIVE EFFECT TO THE ADVICE OF POUTINI-NGAI TAHU IN SETTING APPROPRIATE CONDITIONS AND PROCEDURES FOR APPLICATIONS TO GATHER INDIGENOUS PLANTS AND ANIMALS.

Explanation

The park area had long been a source of food, herbs, medicines, fibres, feathers and timber. The kai moana of the foreshore and inshore reef area (eg Piharau, Inanga, Tuna and Kutai) were a necessity to the traditional hospitality of marae life and to visiting guests in general. Such cultural usage, and the ethic of sustainability, is acknowledged by the department and should continue with appropriate controls in keeping with the principles of the Treaty of Waitangi, but only where it is in accordance with current legislation. The Wildlife Act 1953 currently confers absolute protection on all indigenous animals unless otherwise specified in its schedules. The National Parks Act, which overrides the Wildlife Act, also seeks to preserve indigenous plants and animals. The Conservation Act and Freshwater Fisheries Regulations 1983 have provisions of relevance to native species. Ngai Tahu believe the mana of many species has been eroded by their current protected status. This may be addressed by government as a consequence of the findings of the Waitangi Tribunal.

The removal of indigenous plants and those animals not otherwise protected from the park is therefore an offence unless prior approval has been granted by the Minister. The issuing of authority to remove such plants or animals for traditional Maori purposes is discretionary and must be positively provided for in the park management plan.

It is necessary to define exactly what are the traditional Maori purposes for this area. Poutini-Ngai Tahu (see Policy 5.1.3) will be involved in this definition and in the setting of conditions and procedures for applications to gather indigenous plants and animals. Criteria also need to be established to define the traditional methods and conditions to be met during gathering. All applications to remove indigenous plants and animals from the park should be made to the Regional Conservator and will be referred to Poutini-Ngai Tahu for full consultation (see Policies 5.1.1 Indigenous Plants and Animals, 5.2.12 Fishing and 5.1.3 Ngai Tahu Interests).

A number of factors need to be considered by the department and Poutini-Ngai Tahu before any authorisation can be granted. These include:

- Is the proposed use traditional?
- Is the proposed use non-commercial?
- Is an alternative source available from lands outside the park, and, in particular, modified areas?
- What are the likely impacts on the natural resources of the park and their sustainability?
- What are the likely impacts on other park visitors?

The traditional use will be monitored by Poutini-Ngai Tahu and the department.

5.2.2 RECREATION

- * TO FOSTER A RANGE OF RECREATIONAL OPPORTUNITIES WITHIN THE PARK CONSISTENT WITH THE POLICIES OF THIS PLAN THAT SEEK TO ENHANCE THE EXPERIENCE OF PARK VISITORS;
- * TO ESTABLISH A RECREATION OPERATIONS MANAGEMENT SYSTEM AT THE PARK;
- * TO SELECT INDICATORS AS A GAUGE TO DETERMINE THE AMOUNT OF CHANGE THAT IS OCCURRING TO RECREATION OPPORTUNITIES DUE TO HUMAN FACTORS AND TO SET STANDARDS AS A THRESHOLD VALUE FOR EACH INDICATOR.

Explanation

A range of recreational activities can occur within Paparoa National Park, however, some are more appropriate than others. The criteria used for assessing the appropriateness of any activity, are:

- The activity will not permanently or significantly diminish the qualities of the park;
- The activity will not significantly reduce the enjoyment of other visitors;
- The activity will specifically enhance visitors' enjoyment of Paparoa National Park relative to other areas of the West Coast Region, and New Zealand;
- The activity is in keeping with the themes and character of the landscape units identified within the park.

The main activities which presently occur in the park include sightseeing, picnicking and walking in the coast zone; walking, tramping, camping, caving and canoeing in the karst zone; and hunting and tramping in the mountain zone.

Planning and management of recreation in the West Coast Region is undertaken at two major levels.

At the conservancy planning level a recreation/tourism strategy is being prepared which will set priorities and direction on a broad scale. It will set the park in the context of the recreation opportunities spectrum of the West Coast.

The approach used at the field centre planning level is called the Recreation Operations Management System. The system comprises various elements including: recreation facility inventories; design manuals; work programmes; maintenance schedules; concept plans and prescriptions.

Thus, the conservancy strategy provides overall guidelines and directions which are incorporated into the management plan and the work programme. Concept plans and prescriptions provide the on-site planning and management details. Some proposed and potential developments and upgradings have already been identified under Policies 5.2.7, 5.2.8, and 5.2.9.

Planning processes have been developed in an attempt to resolve the conflict, and provide the best balance, between preservation and use. Limits of Acceptable Change (LAC) is the planning procedure to develop the inventory information on supply, collected through the preparation of a Recreation Opportunity Spectrum, and demand, gleaned from visitor research, into more definitive management objectives.

In applying the LAC concept, managers assume that change to the ecological and social conditions of the area they are managing will occur, due to both natural and human factors. The goal of management is to keep the character and rate of change due to human factors within acceptable limits.

There are several steps in the LAC process but the full implementation of a LAC system, at this stage, as a management planning technique is beyond the scope of this plan. However, the department will develop the LAC process during the term of the plan. To this end indicators and standards will be established, in conjunction with the Board and key recreation groups, which can be utilised in the general planning for the park and will enable full implementation when a review is required.

Indicators and standards provide managers with reference points so that they can judge whether the recreation opportunity for which they are trying to manage is actually being provided over time. If conditions deteriorate and a standard is approached, mitigating action can be taken to avoid unacceptable change. This action can include limiting and distributing use, influencing visitor behaviour, restricting certain types of use and site management.

The standards set are not objectives that one is trying to achieve, rather they are a maximum permissible level of impact. As management experience is gained and other issues develop in the future, there may be a need to select additional indicators and discard or refine existing ones.

5.2.3 INTERPRETATION

- * TO ENHANCE THE EXPERIENCE OF PARK VISITORS BY PROVIDING INTERPRETIVE FACILITIES AND SERVICES THAT WILL FOSTER A BETTER UNDERSTANDING OF THE PARK;
- * TO PREPARE AND REGULARLY REVIEW AN INTERPRETATION STRATEGY FOR THE PARK;
- * TO ENCOURAGE USE OF THE PARK FOR EDUCATIONAL PURPOSES THAT ARE COMPATIBLE WITH PARK VALUES.

Explanation

Interpretation assists visitors in developing a keener awareness appreciation and understanding of the park. It also assists management by encouraging thoughtful use of the recreation resource (as an informed visitor is more likely to protect park values) and promotes public understanding of conservation (GP #16). As defined by Tilden it is "the revelation of a larger truth that lies behind any statement of fact". There are many interpretation techniques including personal services (information officers, guided walks, talks, living interpretation) and non-personal services (audio devices, signs, publications, self-guided walks and vehicle tours, displays).

A number of "stories" pertinent to Paparoa National Park can be developed based on the themes identified for the landscape units (see Section 3.3). Such stories could be, for example:

- the story of water, its journey through the park and its influence on cave and karst features;
- the fluctuating sea level and the consequences in the development of landforms, and in the creation of old islands inland;
- the complex mosaic of lowland forest communities reflecting subtle interactions between natural and physical features;
- the human impacts and cultural associations throughout history.

An interpretation strategy will be prepared for the park that will refine these stories and will select the most effective interpretive media to tell them. Ngai Tahu traditions will only be told when and how Ngai Tahu feel is appropriate.

The strategy will prioritise the development of interpretation projects and concept plans will specify the details. Particular projects will include: expanding on Visitor Centre services; establishing interpretation at Bullock Creek/Cave Creek South; interpretation panels along the highway; and educational kits.

The department has recognised the need to provide more appropriately for the services required at the Visitor Centre. Currently the response has been to upgrade the existing building, but a new Visitor Centre may prove warranted, and this will be investigated.

5.2.4 DESIGN PRINCIPLES

- * TO APPLY A CONSISTENT SET OF DESIGN PRINCIPLES TO THE LOCATION, MAINTENANCE AND CONSTRUCTION OF FACILITIES IN THE PARK.

Explanation

The visual landscape of the park is a product of the many elements which compose it. Taken as a whole these elements compose a uniquely beautiful landscape, which is a significant source of park values. The following design principles are intended to safeguard the scenic value of the park and will be applied to the construction of all new developments and the maintenance of existing facilities within the park. Proposals for the development of new facilities will be accompanied by landscape analyses which evaluate the impact of the development on the park's scenic values.

Visitor Needs

For those recreational activities that are appropriate to the park, if visitors are to be provided with a quality experience their physical, intellectual and cultural needs must be met for that particular activity. This requirement must be balanced against:

- the need to preserve the park's natural values; and
- the minimisation of conflict between different recreationists.

The reconciliation of these potentially disparate factors may mean that the optimal needs of some recreationists cannot always be met. In extreme cases it may warrant the abandonment of a particular development. Such decisions will take cognisance of the Recreation Opportunity Spectrum outlined above in Policy 5.2.2.

Design

It is essential that the natural and cultural values of an area are recognised in design. The goal is to ensure that developments harmonise with the landscape and enhance people's experience of it. To this end:

- materials which relate the structure to the site will, wherever possible, be selected;
- design should relate the structure to the site and recognise, where appropriate, the satisfying elements of Maori and European historical and cultural associations; and

- natural hazards will be identified and considered in the design and siting of works.

Form

Structures should fulfil their intended functions as simply as possible. Detailing should acknowledge and be appropriate to its location in the complex Paparoa landscape. Structures must be kept to a minimum so as not to impose on the landscape and detract from it. Limiting structures to an absolute minimum is important in retaining an atmosphere of remoteness and naturalness.

Scale

Structures which are developed in natural landscapes must relate to both the setting and the intended visitors.

Durability

Structures in natural settings must reflect the colour, texture and robustness of materials indigenous to the site.

Continuity

Developments should relate to each other through the use of materials, form, scale, colour and presentation. This promotes harmony between and within site developments.

Quality

Quality in development is more desirable than quantity. When all the above design principles are integrated in a harmonious fashion, quality should be ensured.

5.2.5 FACILITY CLASSIFICATION AND DESIGN STANDARDS

- * TO CLASSIFY RECREATIONAL FACILITIES IN THE PARK;
- * TO ADOPT RECREATION FACILITY STANDARDS AS GENERAL GUIDELINES FOR CONSTRUCTION.

Explanation

Recreation facilities are comprised of a variety of structures and developments which enhance visitors' enjoyment of the outdoors and the activity they are participating in. They are not always necessary for that enjoyment, but in some circumstances they benefit particular visitors. In addition they help protect the environment and avoid excessive impact on the natural values of an area. Facilities include paths, tracks and routes, campsites, picnic areas, viewpoints, huts and all their structures.

Facilities in the West Coast Conservancy have been classified to identify the variety of types of walking opportunities and service areas. Criteria have been set to establish appropriate standards for each classification and ensure that the requirements of visitors and the environment are met.

These standards provide the "norm" for which facilities are to be developed or upgraded to and at which they will be maintained. In many cases this may involve fewer structures or less construction than may sometimes be envisaged. The provision of design standards does not necessarily mean there will always be a proliferation of structures at every site. What is ensured is that the appropriate development takes place.

Tables 2, 3 and 4 provide the criteria for foot access; picnic areas, viewpoints and car parks; and campsites respectively. The criteria for huts (a national classification) is not provided here as there are no huts in Paparoa National Park and it is not envisaged that huts will be constructed during the term of this plan (see Policy 5.2.10). Shelters, however may be considered, for example, on the Inland Pack Track. They will provide protection from the weather but not sleeping accommodation.

It is considered necessary to develop a sign system throughout the park in order to provide for park, interpretation and to assist in visitor safety. The department's conservancy signs policy will be the basis for the system.

The location of toilets will always recognise Ngai Tahu values (see Policies 5.1.3 and 5.1.11).

5.2.6 ACCESS

- * TO PERMIT AND FACILITATE PUBLIC ACCESS TO AND WITHIN THE PARK CONSISTENT WITH:
 - PRESERVATION OF NATURAL FEATURES;
 - MINIMISATION OF CONFLICT BETWEEN USES;
 - VISITOR SAFETY;
 - RETENTION OF REMOTE EXPERIENCE QUALITIES OF THE PARK.
- * TO SEEK TO HAVE UNFORMED LEGAL ROADS AND ROADS SURPLUS TO REQUIREMENTS INCORPORATED INTO THE PARK;
- * TO OPPOSE THE CONSTRUCTION OF ANY FURTHER ROADS WITHIN THE PARK.

Explanation

While the public normally have the right of access to all areas of the park, it may be necessary to control the use to a level that particular areas can withstand (GP #1). It may be necessary to close or limit numbers to specific areas of the park for certain periods. The proposed Westland Petrel Special Area (see Policy 5.1.12) will have entry controlled by permit issued under delegated authority from the Minister. This is necessary to ensure protection of the colony site and is in keeping with the area's previous status as nature reserve. Access to caves may also be controlled by permit (see Policies 5.1.2 and 5.2.11).

While access will normally be permitted to all, uses of areas for particular purposes or by certain numbers may be controlled to protect the enjoyment, and inspirational value of solitude for the majority of visitors.

Proposals for further development of means of foot access which the department may undertake are set out in Policy 5.2.7. Developments intended to facilitate public access will be subject to the design principles of Policy 5.2.4. In the case of developments associated with commercial enterprise Policy 5.2.17 will also apply. The applicant will be required to assess and report in detail on the full environmental impacts of the proposal under the Environmental Protection and Enhancement Procedures. Management controls for access by boats, off road vehicles and aircraft are addressed in Policies 5.2.14, 5.2.19 and 5.2.20 respectively. State Highway 6 is addressed specifically in Policy 5.3.7.

Every effort will be made to facilitate access by people with disabilities to buildings within the park (GP #20). Where it is appropriate and practicable access to the park for the handicapped and disabled will be provided.

Owing to the relatively small size of the park further formed roads are considered unnecessary and undesirable. Consequently unformed legal roads will be sought for addition to the park.

5.2.7 FOOT ACCESS

- * TO MAINTAIN PATHS, WALKING TRACKS AND TRAMPING TRACKS TO APPROPRIATE STANDARDS;
- * TO ESTABLISH AND MAINTAIN A WALKING TRACK, WITH INTERPRETATION IN THE BULLOCK CREEK AREA, AS DIRECTED BY A CONCEPT PLAN;
- * TO UPGRADE AND MAINTAIN THE INLAND PACK TRACK IN ACCORDANCE WITH THE HISTORIC PLACES ACT 1980 AND TO DESIGNATE IT AS A NEW ZEALAND WALKWAY;
- * TO MAINTAIN ACCESS TO MT BOVIS SUMMIT AS A ROUTE.

Explanation

Foot access (GP #18) has been classified into five categories, in accordance with the Department's Track Classification for Walkways and Other Foot Tracks in New Zealand with appropriate standards designated to each (see Table 2, Figure 3 and the list below).

One development project and one upgrading project are seen as necessary to complement the existing facilities.

A walking track, on the Bullock Creek Farm, interpreting the karst features around Bullock Creek/Cave Creek South will expand on the 'story' about caves and karst in the park. Any work required will be detailed in a concept plan and prescriptions.

Prescriptions will also be prepared to guide the upgrading and future management of the Inland Pack Track. This will include investigations of the possible need to realign foot access in the lower Fox River and Punakaiki River sections. Any work will be in keeping with, and enhance, the historical value of the track as well as interpreting the natural values of those parts of the park that it traverses. It is an archaeological site as defined under the Historic Places Act 1980. The location and recreational experience render it suitable for status as a New Zealand Walkway. Its designation will be sought by the department.

Major bridges will be provided solely on the Lower Pororari/Bullock Creek section of the Inland Pack Track. This is the only foot access where it is possible to provide such a consistent level of bridging development, and therefore recreational opportunity, throughout its entire length.

Access to Mt Bovis is to be maintained as a route with careful marking in alpine areas.

Impacts of visitors will be monitored and the appropriate degree of development kept under review to protect the fragile alpine plant communities.

To deal with the recognised safety problem for visitors walking between Punakaiki River and Truman Track pedestrian access will be investigated and provided, to a path (other) standard. This will be undertaken in conjunction with Transit NZ (See Policy 5.3.7).

The coastal route from Truman Track around Perpendicular Point will be formally marked with the agreement of the landowner. Monitoring of any impacts on the sensitive coastal vegetation, through increased usage, and of any unacceptable consequences for visitor safety will be undertaken as part of the LAC process (see Policy 5.2.2). To protect the natural values whilst maximising the recreational opportunity it may prove necessary to harden sections through limited track formation or other appropriate development.

Existing Path (Disabled)

Dolomite Point

Existing Paths (Other)

Punakaiki Cavern

Truman Track

Te Ana O Matuku (outside the park)

Existing Walking Tracks

Lower Pororari River

Fox River Caves

Existing Tramping Tracks

Inland Pack Track

Upper Pororari River

Existing Route

Mt Bovis

Proposed Foot Access

Upgrading Inland Pack Track

Develop long walk in Bullock Creek/Cave Creek South area

Upgrading Lower Pororari River/Bullock Creek - walking track

Pedestrian access Punakaiki River to Truman Track - path (other)

Potential Foot Access

Tiropahi River to White Horse Creek

Fox River to Tiropahi River

Upgrade/realign Fox River Track

Realign Punakaiki River Track

Cliff-tops near Visitor Centre

Gorge-top Lookout

Path (Disabled) behind Visitor Centre

TABLE 2

FOOT ACCESS - CLASSIFICATION AND STANDARDS

TYPE	PATH (DISABLED)	PATH (OTHER)	WALKING TRACK	TRAMPING TRACK	ROUTE
Class	1	2	3	4	5
Maximum length (km)	0.5	4.0	16.0	> 16.0	no max
Maximum time	15 mins	2 hrs	8 hrs	> day	no max
Maximum grade	5°	8°	15°	25°	no max
Minimum width (m)	1.5	1.0	0.75	0.3	-
Minimum surface	formed, smooth	formed,	formed	variable	natural
Benching	○	○	○	○	
Retaining Walls	○	○	○		
Culverts	○	○	○		
Drains	○	○	○	○	
Steps		○	○	○	
Stiles		○	○	○	
Boardwalk	○	○	○	○	
Corduroy			○	○	
Bridges					
- wood & sides	●	●	○		
- wood, no sides	●	●	○	○	
- swingbridge			○	○	
- walkwire					○
Safety barriers	○	○			
Seats	●	●			
Toilets	●	●	○	○	
Shelters	●	●	○	○	
Huts				○	
Signs	●	●	●	●	○
Markers	○	○	●	●	○
PNP ZONE	C	C	K	K	M

Key: ● = essential
○ = optional
C = Coast, K = Karst, M = Mountains

5.2.8 SIGHTSEEING AND PICNICKING

- * TO RECOGNISE SIGHTSEEING AND PICNICKING AS APPROPRIATE AND SUITABLE RECREATIONAL ACTIVITIES WITHIN THE PARK;
- * TO PROVIDE PICNICKING FACILITIES, ROADSIDE VIEWPOINTS AND REST AREAS ALONG THE COASTAL FRINGE HIGHWAY CORRIDOR.

Explanation

Sightseeing and picnicking are activities that can take place almost anywhere without specific facilities. However, it is appropriate to provide some areas specifically designed for picnicking and sightseeing. Appropriate sites are generally within the coast zone, easily accessible by vehicle, near State Highway 6 and sea. Development and maintenance of all facilities directly affecting State Highway 6 will be undertaken in consultation with Transit NZ (see Policy 5.3.7). Design standards for viewpoints and picnic areas are shown in Table 3.

Existing Viewpoints and Picnic Areas

Dolomite Point - major picnic area and carpark
 Irimahuwhere Point Lookout - viewpoint and minor picnic area
 Pororari River-mouth - minor picnic area and carpark
 Punakaiki River-mouth - minor picnic area and carpark
 Coghlan's Lookout - viewpoint

Proposed Viewpoints and Picnic Areas

Bullock Creek (see also Policies 5.2.7 and 5.2.9)
 Punakaiki River-mouth - major picnic area

Potential Viewpoints and Picnic Areas

Kaipakati Point - major picnic area
 White Horse Hill - viewpoint
 Fox River Bridge (outside the park) - major picnic area
 Cliff-tops near Visitor Centre - viewpoint
 Gorge-top - viewpoint.

TABLE 3

PICNIC AREAS, VIEWPOINTS, CARPARKS - CLASSIFICATION AND STANDARDS

TYPE	MAJOR PICNIC AREA	MINOR PICNIC AREA	VIEWPOINT	CARPARK
Gravel surface				
- vehicles	●	○	●	●
Grass surface				
- people	●	●	○	
Screening	●	○		
Traffic barriers	●	○	●	●
Tables	●	●	○	
Picnic platforms	○	○		
Running water	●	○		
Toilets	●			
Shelters	○			
Signs	●	●	●	●
Rubbish bins	○			
Fireplaces	○			
PNP ZONE	C	C	C	C, K

Key: ● = essential

○ = optional

C = Coast, K = Karst, M = Mountains

Area Requirements:

Vehicle = 3x7m per car

People = (group space) 20x15m if all open smaller if screened

5.2.9 CAMPING

- * TO ENCOURAGE FULLY SERVICED CAMPING AT PUNAKAIKI MOTOR CAMP;
- * TO PROVIDE AND MAINTAIN STANDARD CAMPING AREAS AT BULLOCK CREEK FARM AND PORORARI RIVER;
- * TO ENCOURAGE ROADSIDE CAMPING AT PUNAKAIKI RIVER VALLEY, FOX RIVER BRIDGE AND TIROPAHI RIVER;
- * TO ALLOW INFORMAL CAMPING IN THE PARK EXCEPT WHERE SPECIFICALLY PROHIBITED TO AVOID DETERIORATION OF NATURAL AREAS;
- * TO SUPPLY RUBBISH BAGS AND A PORTABLE STOVE HIRE FACILITY AT THE VISITOR CENTRE;
- * TO ESTABLISH TOILETS AT APPROPRIATE INFORMAL CAMPING AREAS.

Explanation

The spectrum of camping activities and the facilities they require have been classified into three categories in Section 5.2.5 in accordance with the department's national Conservation Campsites system (see also Table 4).

In Paparoa National Park it is appropriate and possible to cater for all levels of this camping spectrum. Each landscape unit can offer a different camping opportunity. The Punakaiki Motor Camp although just outside the park, meets the top end of the scale (Class 1) while it is possible for backcountry visitors to find places to camp at the other end of the scale (Class 3) in the karst and mountain zones.

Some of these Class 3 areas, however, are becoming popular and regularly used. As a consequence the detrimental environmental impact at informal camping areas such as the Ballroom Overhang and the Dilema/Fossil Creeks junction is becoming more evident. This is seen in the increased rubbish and human waste left at camp sites along with damage to trees for firewood. This is especially unacceptable in the fragile karst zone.

These particular sites will always be popular for camping, so to encourage minimum impact at them there are several possibilities. A public awareness campaign (see Policy 5.2.21), encouraging people to carry out their rubbish, bury human waste properly and carry portable stoves for cooking, can go some way towards decreasing the impact. However, additional incentives are required and these will include supplying rubbish bags and hiring out portable stoves from the visitor centre.

A similar public awareness campaign could equally apply to Class 3 campsites where they are accessible by vehicle but are without facilities. Most of these sites are, however, just outside the park. Camping at these sites, especially with a campervan, is popular. It is not considered appropriate to ban this type of camping as there is a recognised demand for these overnight stops, so the use of sewage dump points outside the park will be promoted.

Areas where it would be appropriate to provide standard camping areas (Class 2) are listed below. Unlike the Class 3 sites, which would allow camping but not actively encourage it, these areas would often cater for both campervan and tent campers. Concept plans would have to be prepared for these developments.

One specific site where campsites should not occur is the Truman Track. The coastal vegetation at the end of the track is extremely fragile and cannot withstand such use. A park bylaw will be prepared to achieve this control.

Existing and proposed campsites, as listed below, are shown in Figure 3.

Existing Campsites

- Bullock Creek Farm - informal
- Fox River - standard
- Ballroom Overhang - informal
- Dilemma Creek/Fossil Creek junction - informal
- Punakaiki Motor Camp - serviced campground (outside the park)

Proposed Campsites

- Bullock Creek Farm - standard
- Pororari River (upstream of bridge) - standard

Potential Campsites

- Fox River Bridge (outside the park)
- Tiropahi River
- Pororari Ford
- Punakaiki River (upstream of bridge)

TABLE 4

CAMPSITES - CLASSIFICATION AND STANDARDS

TYPE	SERVICED	STANDARD	INFORMAL
Class	1	2	3
Accessibility	vehicle	vehicle	foot
Surfaces	gravel/grass	gravel/grass	natural
Screening	structures/ vegetation	vegetation	natural
Traffic barriers	●	●	
Tables	●	○	
Rubbish Bins	●	○	
Fireplaces	○	○	
Running Water	●	●	●
Toilets	●	●	○
Shelters	●	○	○
Signs	●	●	○
Showers	●		
Kitchen	●		
Lights	●		
Powered Sites	○		
Shop	○		
Waste Disposal	○		
PNP ZONE	C	C,K	K,M

Key: ● = essential
○ = optional
C = Coast, K = Karst, M = Mountains

Area Requirements:

Vehicle = 3x7m per car
Campervan = 5x10m per van
People = 20x15m if all open smaller if screened

	Existing	Proposed
Walk	—	—
Track	- - -	- - -
Route
Barrier Free Walk	♿	
Picnic Areas:		
Major	⌒*	⌒*
Minor	⌒	⌒
Camp Sites :		
Serviced campground	▲1	▲1
Standard camping area	▲2	▲2
Informal camping area	▲3	▲3
Viewpoint	△	

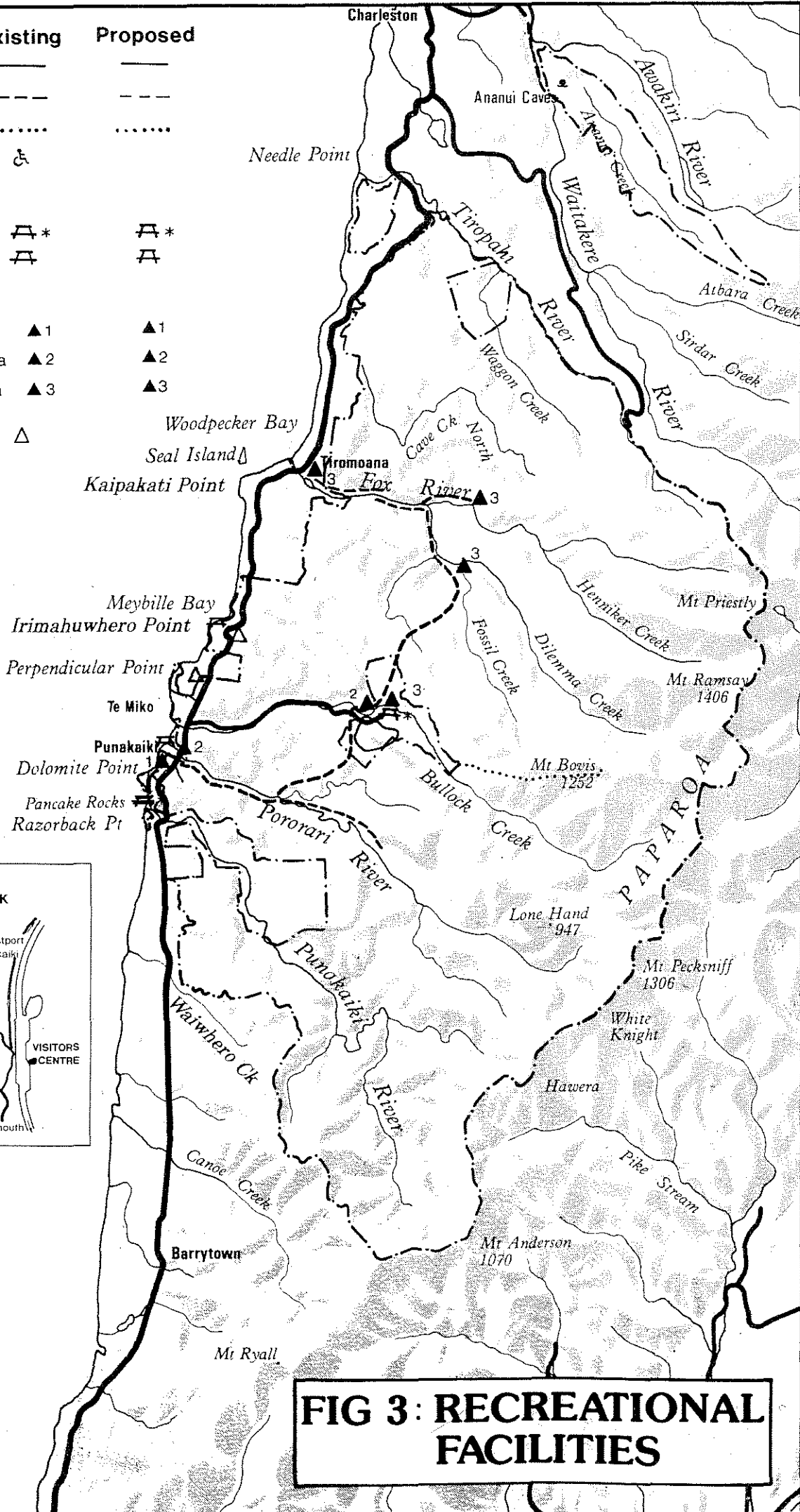
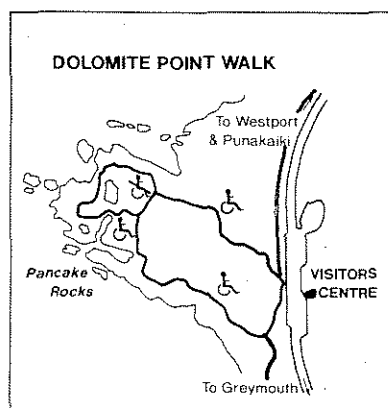
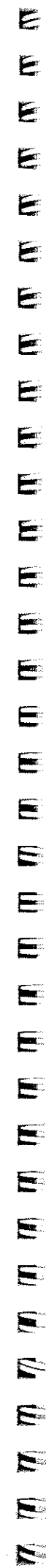


FIG 3: RECREATIONAL FACILITIES



5.2.10 BUILDINGS

- * TO KEEP THE NUMBER OF BUILDINGS IN THE PARK TO A MINIMUM;
- * TO ENSURE THAT SUCH BUILDINGS AS ARE NECESSARY IN THE PARK ARE COMPATIBLE WITH AND ARE APPROPRIATE TO THE LANDSCAPE IN WHICH THEY ARE LOCATED;
- * TO NOT ESTABLISH TRAMPING HUTS IN THE PARK.

Explanation

The national park is an area of predominantly natural values and should not have any more buildings or permanent structures within it than are essential for the enjoyment of the outdoor environment or the safety of the visiting public, and as are required for management purposes (GP #25). With the exception of buildings that need to be clearly visible for safety reasons, buildings which are required should harmonise with rather than dominate other components of the landscape, and their design should be in sympathy with one another where more than one is involved (see Policy 5.2.4). The design of all buildings will be subject to the approval of the department.

There are no tramping huts in the park. The movement towards encouraging self sufficiency in the backcountry, along with the substantial capital outlay required for construction and ongoing maintenance of huts, means that it is not philosophically or economically acceptable to provide more huts. In addition, Paparoa National Park is relatively small with many of its recreational opportunities being of a short time duration in a lowland setting. Paths and tracks frequently access campsites and shelters are being investigated for the Inland Pack Track. The facilities provided for camping on Bullock Creek Farm are to be upgraded and the potential for more developed forms of accommodation, such as a lodge, will be investigated during the finalisation of the farm management plan. For those who do not want to camp out there is accommodation available at the Punakaiki Motor Camp.

The Croesus Track, just south of the park, is an easy two day tramping trip which has a twenty bunk hut providing comfortable accommodation at the halfway point. Likewise the Bucklands Peak Track to the north which has a four bunk tramping hut on it. Management of the mountains unit of the park is directed at protecting the often fragile alpine ecosystem and the qualities of remote experience. Huts would be in conflict with this management direction.

Paparoa National Park, therefore, provides another experience in the spectrum of backcountry accommodation.

The need for a new visitor centre at Punakaiki will also be investigated (see Policy 5.2.3).

5.2.11 CAVING

- * TO RECOGNISE CAVING AS A SPECIALIST RECREATIONAL ACTIVITY WHICH CAN PROVIDE VALUABLE INFORMATION ABOUT THE KARST AND CAVE RESOURCE;
- * TO ALLOW ACCESS TO CAVES CONSISTENT WITH THE PROTECTION OF NATIONAL PARK VALUES AND IN ACCORDANCE WITH THE DRAFT GENERAL POLICY AND GUIDELINES FOR CAVE AND KARST MANAGEMENT;
- * TO CLASSIFY PUNAKAIKI CAVERN AND FOX RIVER TOURIST CAVE AS OPEN ACCESS CAVES;
- * TO RECOGNISE ANANUI CAVE AS A POTENTIAL TOURIST CAVE;
- * TO DISCOURAGE THE PLACEMENT OF PERMANENT PROTECTION, SUCH AS BOLTS, FOR CAVING.

Explanation

Paparoa National Park is considered to be a major part of one of the three main caving areas in New Zealand, with its variety of challenge, danger and degree of difficulty. Over 30 named caves and cave systems have been identified and it is considered that many more remain to be discovered.

Very few safe and robust caves are currently known to exist in the park yet there is a high public expectation to visit them. Controls are often controversial and difficult to enforce, and it is not easy to differentiate between experienced cavers and others.

Cave user groups have different levels of awareness. These groups can be classified as follows:

- **Recreational Cavers/Speleologists** - people for whom caving is a major recreational interest, and who are equipped for and skilled in cave exploration. These people generally belong to the NZSS or its member caving groups or clubs.
- **Outdoor Pursuit Organisations** - People who participate in caving as one among many outdoor recreational pursuits, under the leadership of others with the appropriate equipment and expertise.

- **"Adventure" or Concessionaire "Wild" Caving** - Includes people who participate in a recreational caving experience for a fee. They are usually well equipped and are led by professional, experienced guides. Potential exists for severe damage to the cave environment if operations are not properly controlled and monitored.
- **Cave Tourists** - People who acquire a 'passive' experience in caves fully developed and modified for tourism. Participants pay a fee for access and guiding.
- **Other groups and individuals** - people who belong to groups such as scouts, schools, youth organisations, etc, and unaffiliated individuals who generally participate in caving on an irregular basis. They may not be well equipped and may lack caving skills, and cave conservation awareness. Often such groups go caving in large numbers.

It is generally recognised that recreational cavers explore, survey, map and document karst and caves as part of their activity. This information is extremely valuable in the protection and management of this resource.

Most caves in the park are not considered to be suitable for general public access either because they are physically dangerous, or because of their vulnerable scientific and aesthetic values.

The Punakaiki Cavern and Fox River Tourist Cave are considered to be the most accessible and safest caves for general unpermitted access by the other groups.

Cave Creek South, Cataract Pot and associated dolines, grykes and karren are potentially suitable for development for viewing by the general public. This Bullock Creek/Cave Creek South area is not considered to be suitable for general public access until information systems, tracks, safety barriers and viewing platforms are established. This development will be undertaken as part of a new long walk (see Policy 5.2.7). Ananui Cave has access presently controlled by permit and has a concessionaire running tours through it. Previous investigations have demonstrated that Ananui Cave is potentially suitable for development as a tourist cave.

Access to all caves will be controlled by their classification in line with the draft General Policy and Guidelines for Cave and Karst Management (as outlined in Policy 5.1.2.) where this is consistent with the National Parks Act and the protection of intrinsic values. Classification will be undertaken as part of the preparation of a West Coast Cave and Karst Management Strategy (see Policy 5.1.2).

Where possible in any given area, one or two robust open access caves should be managed for general public inspection, and perhaps one or more for school and youth groups, adventure and concession caving. Interpretation and access will be provided for caves which are capable of sustaining visitors. These caves should not be considered sacrificial. They

should be managed as far as possible to preserve their integrity, to convey messages about cave conservation, and to take the pressure away from more sensitive caves in the area.

As there are few suitably robust caves in the park such groups should generally be directed to robust caves outside the park.

All open access, limited access, and in some cases restricted access caves and cave passages will be available, subject to management constraints and consent mechanisms, to the New Zealand Speleological Society and its member groups and clubs.

When placing permanent protection, using bolts and other foreign material, unacceptable impacts will be taken into consideration. All visitor groups should be encouraged to adopt the New Zealand Speleological Society's Ethical Guidelines.

5.2.12 FISHING

- * TO ALLOW RECREATIONAL FISHING FOR INTRODUCED SPECIES WHERE THE PROTECTION OF PARK VALUES IS NOT ADVERSELY AFFECTED;
- * TO NOT PERMIT COMMERCIAL FISHING WITHIN THE PARK.

Explanation

Within the park fishing is limited to introduced species for which licences are required from the West Coast Fish and Game Council. Indigenous fish species are mostly protected and recreational fishing for introduced species must have only negligible impact on indigenous fish habitats (GP #11).

The tino rangatiratanga of Poutini-Ngai Tahu over the fisheries of the park, as guaranteed by the Second Article of the Treaty of Waitangi, is recognised. A number of factors must be taken into consideration, however, before any fishing for indigenous species would be allowed (see Policy 5.2.1).

Trout fishing occasionally occurs in the river mouths. Surf casting and whitebaiting are more common, as adjacent uses.

5.2.13 CLIMBING

- * TO RECOGNISE ROCK CLIMBING AS AN APPROPRIATE RECREATIONAL ACTIVITY IN THE PARK;
- * TO DISCOURAGE THE PLACEMENT OF PERMANENT PROTECTION, SUCH AS BOLTS, FOR CLIMBING.

Explanation

There is some potential for rock climbing within the park particularly in the coastal granite and mountain zone gneiss. Generally the limestone in the karst zone is not suitable. In climbing respect must be shown to the landforms which embody the tupuna of Ngai Tahu.

The park offers rock climbing from easy scrambling along the coastline to the challenges of high featureless rock faces for the more experienced climber.

Rock climbing is an increasingly popular sport in New Zealand and there is pressure to find new climbing areas. On the West Coast the most popular climbing areas are outside the park at nearby Charleston and Seventeen Mile Bluff.

Rock climbing does not often conflict with other recreational users and the activity itself has a relatively low impact. However, permanent protection, such as bolts, are considered undesirable. Congregation of climbers at the base of rock faces can also cause damage to the vegetation from trampling.

5.2.14 BOATING AND CANOEING

- * TO RECOGNISE NON-MOTORISED BOATING AND CANOEING AS APPROPRIATE RECREATIONAL ACTIVITIES IN THE PARK;
- * TO ALLOW MOTORISED BOATS AND CRAFT IN THE PARK ONLY IN SPECIAL CIRCUMSTANCES FOR SEARCH AND RESCUE AND ESSENTIAL PARK MANAGEMENT PURPOSES.

Explanation

The park has some potential for boating and canoeing. The major rivers - Punakaiki, Pororari and Fox Rivers - are large enough for small boats and canoes. The lower reaches of the rivers are accessible to motorised boats or other craft, but these are mostly outside the park boundary.

The major rivers in the park are generally flat water and their use for easy canoeing occurs in the karst zone.

Boating and canoeing have low environmental impact, but motorised boating activities will conflict with other visitors (see GP #23 and Policy 5.1.11). Their noise is a major disturbance to visitors looking for peace and quiet in a park, and they can cause water pollution, induce shore erosion and introduce water weeds. Better opportunities exist for motorised boats on a number of rivers outside the park, but in the region, such as the Grey, Buller and Ahaura Rivers.

5.2.15 HUNTING

- * TO RECOGNISE HUNTING AS A RECREATIONAL ACTIVITY AND AS A POTENTIAL MEANS OF WILD ANIMAL CONTROL.

Explanation

It is recognised that private hunters have an important regulatory effect on populations of deer, goats and possums, therefore recreational hunting of these species will be encouraged throughout the park (see GP #9 and Policy 5.1.8).

Goats are the most numerous wild animal and they are the most commonly sought after animal by local hunters who hunt in the park. Dogs will only be permitted in exceptional circumstances (see Policy 5.1.9).

There is a small population of red deer, but they are not often hunted. Possum hunting is carried out regularly in the more accessible parts of the karst zone, but only infrequently in the more remote areas of the park in general.

The carrying and discharging of firearms is allowed by permits issued by the Field Centre Manager at Punakaiki. The permitting is a useful means of monitoring the beneficial effects of hunters and also assists in directing their efforts into those areas where control of undesirable animals is most needed.

5.2.16 VISITOR SAFETY

5.2.16.1 General

- * TO PROMOTE SAFE AND RESPONSIBLE ATTITUDES TO THE USE OF THE PARK THROUGH EDUCATION AND INFORMATION;
- * TO ENSURE THAT PARK FACILITIES ARE MAINTAINED TO A SAFE STANDARD;
- * TO PROVIDE AN "INTENTIONS" SYSTEM FOR PARK VISITORS;
- * TO ENSURE THAT CONCESSIONNAIRES HAVE RESPONSIBILITY FOR PUBLIC SAFETY IN RESPECT OF THEIR OPERATIONS;
- * TO COOPERATE AS NECESSARY WITH SEARCH AND RESCUE AND CIVIL DEFENCE OPERATIONS IN THE PARK.

Explanation

There is an element of risk in all outdoor recreational activities, and it is therefore impossible to guarantee visitor safety (GP #28). While individuals are primarily responsible for their own safety all reasonable precautions will be taken by management for the safety and protection of park visitors.

This will include the department being responsible for constructing and maintaining facilities to a high and safe standard. This does not necessarily mean providing facilities purely for the protection of visitors, but any that are in place to enhance recreational activities should be safe to use. The provision of information and advice about natural hazards especially those unique to Paparoa, by the department, in conjunction with the Mountain and Water Safety Councils, will aim to make visitors aware of their responsibility for their own safety.

In the case of emergency situations the Police are responsible for coordination of Search and Rescue.

Concessionnaires will be required to demonstrate that their equipment, staff operating practices and training programmes meet appropriate safety standards to be determined by the department.

5.2.16.2 Coast

- * TO MAINTAIN SAFETY BARRIERS AND A LIFEBOUY AT APPROPRIATE SITES ALONG THE DOLOMITE POINT WALK;
- * TO INFORM THE PUBLIC ABOUT WEATHER AND TIDAL INFORMATION.

Explanation

Concern for visitor safety in the coast zone is mainly centred around water, particularly the unpredictable nature of the sea, and cliff hazards on the high energy coastline. The Water Safety Council assists in the promotion of water safety and the development of expertise, but otherwise considers that the department is responsible for water safety on its estate.

Dolomite Point Walk and Truman Track provide the main access (apart from the main highway) to the sea. There are safety barriers and a lifebuoy on Dolomite Point. Visitors are prevented from climbing onto the Pancake Rocks. There have been cases of people falling off these rocks and the ones at the end of Truman Track. The nature of the Dolomite Point Walk and the high use it receives by the "passing" tourist justifies the establishment of safety barriers. The Truman Track on the other hand receives a slightly different type of visitor and to erect safety barriers would destroy the present unmodified character of the coast. In this case the role of the department would be to make people aware of any possible dangers through pamphlets or signs.

When providing facilities such as picnic areas, lookouts or the Visitor Centre at Punakaiki, planning will take into account potential effects on road users.

5.2.16.3 Karst

- * TO ENSURE ANY "OPEN ACCESS" CAVES HAVE MINIMUM HAZARDS AND THAT APPROPRIATE SAFETY BARRIERS, PATHWAYS, ROUTES AND SIGNS ARE INSTALLED;
- * TO ENCOURAGE GROUPS OTHER THAN THOSE FROM RECOGNISED CAVING CLUBS TO USE SAFER CAVES;
- * TO ENCOURAGE RECREATIONAL CAVERS TO BE RESPONSIBLE FOR THEIR OWN SAFETY;
- * TO PROVIDE INFORMATION ABOUT WEATHER CONDITIONS AND POTENTIAL FLOOD HAZARDS;
- * TO ENCOURAGE THE USE OF THE NZ SPELEOLOGICAL SOCIETY RESCUE SYSTEM FOR CAVE RESCUE.

Explanation

The draft General Policy and Guidelines for Cave and Karst Management in areas managed by the Department of Conservation outlines the policy for visitor safety and search and rescue. The West Coast Cave and Karst Management Strategy and Operational Guidelines expands on the national policy from a conservancy perspective.

Caves have been classified into various categories and those classed as "Open Access" with no more than minimum hazards should be the only ones for general public use. Likewise school and youth groups should be encouraged to use safe caves selected by park staff.

On the other hand recreational cavers, belonging to caving clubs recognised by the New Zealand Speleological Society, should be able to determine the degree of risk involved.

The NZ Speleological Society has a formalised rescue system which requires specialised skills and equipment. It operates under the recognised search and rescue system.

The hydrology of the karst unit is a complex phenomenon with unique hazards. The area is prone to "flash-floods" which can be dangerous for visitors unaware of this potential and the department will seek to inform them of the hazard.

5.2.16.4 Mountains

- * TO PROVIDE INFORMATION ABOUT CONDITIONS IN THE MOUNTAINS.

Explanation

The highcountry of the park is rugged and untracked. It is not easy country for inexperienced visitors and the department will endeavour to advise them of the likely difficulties. This will be done through interpretations of long range weather forecasting, publications and general information services at the Visitor Centre. The more experienced visitors such as climbers, trampers and hunters are expected to be responsible for their own safety, especially in terms of making decisions about the conditions.

5.2.17 RECREATION CONCESSIONS

- * TO GRANT CONCESSIONS FOR THE ESTABLISHMENT OF LOW IMPACT COMMERCIAL ACTIVITIES THAT WILL ENHANCE PUBLIC USE AND ENJOYMENT OF THE PARK WHILST ENSURING PUBLIC SAFETY AND THAT ARE CONSISTENT WITH CONSERVING ITS NATURAL AND HISTORICAL QUALITIES IN PERPETUITY;
- * TO GRANT CONCESSIONS FOR COMMERCIAL OPERATIONS WITHIN CAVES IN ACCORDANCE WITH THE GENERAL POLICY FOR NATIONAL PARKS AND THE DRAFT GENERAL POLICY AND GUIDELINES FOR CAVE AND KARST MANAGEMENT WHERE CONSISTENT WITH THE PROTECTION OF NATIONAL PARK VALUES;
- * TO PERMIT THE ERECTION WITHIN THE PARK, FOR THE PURPOSES OF ANY CONCESSION ACTIVITY, OF REMOVABLE FACILITIES ONLY;
- * TO SEEK TO MINIMISE ANY CONFLICT BETWEEN CONCESSION ACTIVITIES AND OTHER PARK VISITORS;
- * TO MONITOR LEVELS OF PRIVATE AND COMMERCIAL USE OF THE PARK AND THE EFFECTS OF THIS USE ON THE PARK ENVIRONMENT IN ORDER TO DETERMINE A DESIRED LEVEL OF COMMERCIAL USE;
- * TO RECOVER COSTS OF ALL ADMINISTRATION AND MONITORING AND SET APPROPRIATE RESOURCE RENTALS AND CONCESSION FEES.

Explanation

The General Policy for National Parks (GP #26) includes a Concessions Policy* that permits the granting of licences for the carrying on of any trade, business or occupation within a national park provided that it is in accordance with the aims, objectives and policies of the management plan.

* See footnote on page 22.

Whilst a major management objective is to provide opportunities for park visitors to appreciate the park, the means of doing so and the facilities provided must not compromise protection values. The activity must be appropriate to Paparoa National Park and restrictions and conditions will normally be applied to a licence to protect park resources and to ensure visitor safety.

Management will continue to exercise the right to limit the number of concessionaires operating in the park to ensure:

- The natural environment is not adversely affected;
- The enjoyment and appreciation of park values by other visitors is not diminished;
- The continuity, viability, quality of service and safety of each commercial operation is not compromised (management would prefer a limited number of viable, efficient and full-time operators to many part-time operators).

Only low impact activities will be considered, such as guided walking, tramping, canoeing, hunting, tubing, rafting and caving. Activities which would require the regular use of motorised transport or the erection of permanent facilities within the park will not be considered. The removable facilities considered appropriate will not include huts. A bond will be applied to cover non-removal of such facilities. Concessions involving aircraft landings will not be allowed (see Policy 5.2.20).

Application for commercial operators within caves or karst will also be dealt with in accordance with the department's draft general policy for cave and karst management. Given the need to exert tight control over concessions in caves, in the interest of protecting natural and physical values, it is preferable to limit the number of operations in each cave to one (see Policy 5.1.2).

Concessions involving interpretation will be in keeping with the Themes and policies of this plan (see Policy 5.2.3).

Concessions applied for over land and water adjacent to the park will be considered with regard to the provisions of this plan. This will allow opportunities to be fostered that are complimentary to park values.

The department retains the right to undertake operations, that may be perceived as being suitable for concessionaires, on its own behalf for such reasons as the need to ensure protection of natural values or to guarantee continuity of service.

5.2.18 COST RECOVERY

- * TO APPLY THE COST RECOVERY POLICIES OF THE DEPARTMENT OF CONSERVATION FOR USE OF PARK SERVICES AND FACILITIES AND SALE OF PUBLICATIONS WHERE THIS IS APPROPRIATE AND APPLICABLE.

Explanation

The Department of Conservation, in line with Government policy, is pursuing a policy of cost recovery.

Under the National Parks Act (4(2)e) the public shall have freedom of entry and access to parks subject to certain conditions. A fee for entry to the park can not be charged, but use of facilities such as campsites may require a payment to cover the cost involved in provision and maintenance of these facilities (GP #4).

5.2.19 OFF ROAD VEHICLES

- * TO ALLOW THE USE OF VEHICLES IN THE PARK ONLY ON EXISTING FORMED ROADS.

Explanation

The use of vehicles other than on formed roads is inconsistent with the general principles of national parks (GP #19). They can cause damage to tracks, vegetation and natural features as well as disturbing or endangering other park visitors.

Adequate opportunities exist in other parts of the region, and Bullock Creek Farm in particular, for off road activities. Trail bikes, four wheel drive vehicles, mountain bikes and other vehicles as defined in the Transport Act 1962 will therefore not be permitted in the park apart from on existing formed roads. Exceptions may be granted for park management activities such as search and rescue operations or servicing park facilities.

5.2.20 AIRCRAFT AND AIRSPACE

- * TO ALLOW AIRPLANE AND HELICOPTER LANDINGS IN THE PARK ONLY FOR PARK MANAGEMENT PURPOSES;
- * TO ESTABLISH A RESTRICTED AIRSPACE AROUND THE WESTLAND PETREL SPECIAL AREA;
- * TO DISCOURAGE LOW ALTITUDE FLYING AND TO SEEK THE COOPERATION OF AIRCRAFT OPERATORS TO DETERMINE THE DEGREE OF AIRCRAFT USE AND FLIGHT PATTERNS OVER THE PARK TO MINIMISE THE DISTURBANCE TO OTHER VISITORS.

Explanation

The Civil Aviation Act 1964 and its regulations provide for the general control of aircraft. The objective of the above policies is to keep the level of adverse effects of aircraft over-flying (above 500feet) the park to a level that is not incompatible with the enjoyment of other park visitors (GP #21).

In order to retain the natural character of remote experience and quiet appreciation airplanes and helicopters will not generally be permitted to land within the park. It is recognised that this precludes the development of certain opportunities, but it is believed that this particular visitor demand can be satisfied to a great extent in areas outside the park. A bylaw will be prepared to provide the necessary control (see Policy 5.3.5).

Helicopter landings may be approved within the park in exceptional circumstances for particular park management purposes such as research, promotional activities, search and rescue, wild animal control and fire control.

There has been no demand for use of the park for hang-gliding and parapenting, but such usage may develop. The actual use of hang-gliders and parapents is unlikely to conflict with other visitors, so it will be allowed providing their access through the park is on the same terms as all recreational visitors.

Airdrops will only be permitted in the park for emergency circumstances by consent of the Field Centre Manager.

To avoid excessive and unnecessary disturbance of the Westland petrels the department will seek to implement a restricted airspace around the Westland Petrel Special Area in conjunction with the Ministry of Transport. The inclusion of adjoining colony areas, such as the Royal Forest and Bird Reserve, will also be advocated by the department.

5.2.21 WASTE DISPOSAL

- * TO ENCOURAGE THE PUBLIC TO BRING THE LEAST AMOUNT OF POTENTIAL RUBBISH INTO THE PARK AND TO TAKE IT WITH THEM WHEN THEY LEAVE;
- * TO PROVIDE RUBBISH BINS ONLY AT EASILY ACCESSIBLE AND HEAVILY USED SITES;
- * TO DISPOSE OF RUBBISH AT SUITABLE SITES OUTSIDE THE PARK BOUNDARIES.

Explanation

It is now a widely accepted management practice to encourage recreational visitors in natural areas to carry out their own rubbish. This is necessary to ensure the problem of rubbish disposal is kept to a manageable level and to maintain the environment in its natural state (see Policy 5.2.22).

Education through publicity, interpretation and conservation officer contact will be the prime means of minimising the litter disposal problem. Rubbish bins are provided in areas of very high use and easy accessibility, however they will be phased out and will eventually only be situated at the Visitor Centre. This is regarded as still being consistent with the provisions of the Litter Act 1979. Their provision conflicts with the Environmental Care Code as they tend to encourage the spread of rubbish. In addition their maintenance increases the work load of park staff whose time is better spent in other roles.

A park bylaw will be prepared to provide a further mechanism for enforcing appropriate rubbish disposal.

The department is only responsible for disposing of rubbish produced at its buildings and as a direct consequence of its activities. Effort will be made to assist Buller and Grey District Councils, as appropriate, to deal with the wider issue of rubbish disposal throughout the region.

5.2.22 ADVERSE IMPACT

- * TO MINIMISE THE IMPACT OF COMMERCIAL AND INDUSTRIAL ACTIVITIES CARRIED OUT WITHIN THE PARK;
- * TO INFLUENCE AGENCIES WITH STATUTORY AUTHORITY FOR ACTIVITIES LIKELY TO HAVE AN ADVERSE IMPACT ON THE PARK;
- * TO ENSURE A PUBLIC AWARENESS CAMPAIGN ABOUT MINIMUM IMPACT IS MAINTAINED.

Explanation

Side effects from development, such as air and noise pollution, may reduce the amenity value of areas of the park. Every endeavour will be made to keep such adverse impact to a minimum by requiring concessionaires, network utility operators and other developers to adopt non-polluting practices.

Special provisions may be imposed to ensure that the risk of chemical leakage or the combustion of inflammable goods with consequent risk to the park and its visitors is avoided.

There are some activities that are not within the control of the park administration. In such cases the appropriate authorities will be urged to impose conditions that achieve the same level of protection for the park as would be required for those activities if they were under direct control (GP #3).

The promotion of the Environmental Care Code for recreational activities is essential. It is encouraged internationally and the department will be producing appropriate publications about it. Issues covered relate to rubbish, human waste, firewood, campfire scars, noise, group size, erosion on tracks, water pollution, etc. Specific issues relating to waste disposal and camping are discussed under Policies 5.1.11, 5.2.21 and 5.2.9.

5.2.23 FENCING AND GRAZING

- * TO NOT ALLOW GRAZING WITHIN THE PARK;
- * TO FENCE PARK BOUNDARIES WHERE IT IS PROBABLE THAT STOCK MAY ENTER THE PARK.

Explanation

The majority of the park adjoins other lands of the conservation estate and it is not necessary to fence these boundaries. However, there are areas adjoining private farm land where fencing is considered necessary to protect park values. The provisions of the Fencing Act 1978 will apply as required.

The design principles for facilities in the park will be applied to fencing (see Policy 5.2.4).

The Westland petrel colony is considered the most important of these areas and will have the highest priority.

The priorities for fencing other areas will be assessed in terms of biological, soil, water and recreational values.

Ring fencing will be maintained around the farmed area at Bullock Creek.

The co-operation of adjoining landowners will be sought to investigate open space covenants over values which complement the park, including alternative fencing agreements will be undertaken.

No traditional grazing areas are included in the park, therefore grazing is considered inappropriate as it is not in keeping with the primary management aim of preservation (GP #12).

5.2.24 PROSPECTING, EXPLORATION AND MINING

- * TO GENERALLY OPPOSE THE ISSUE OF ANY MINERAL RELATED ACCESS ARRANGEMENT UNLESS IT CAN BE DEMONSTRATED THAT THE ENSUING DAMAGE WILL BE MINIMAL AND THAT THE MINING IS OF GREATER NATIONAL INTEREST THAN PARK VALUES;
- * TO CONSIDER EACH PROSPECTING, EXPLORATION OR MINING ACCESS ARRANGEMENT APPLICATION ON ITS MERITS;
- * TO SEEK STRICT CONTROLS TO PROTECT PARK VALUES IF AN ACCESS ARRANGEMENT IS TO BE GRANTED WITHIN THE PARK;
- * TO SEEK PROHIBITION OF ACCESS TO THE WESTLAND PETREL SPECIAL AREA UNDER THE CROWN MINERALS ACT 1991.

Explanation

All land in New Zealand, other than that specifically excluded, is subject to the Crown Minerals Act 1991 and the Resource Management Act 1991. Mining of national park land is only permissible if a mineral related access arrangement pursuant to S.61 of the Crown Minerals Act, is entered into by the Minister of Conservation after consultation with the Authority (GP #29). Mining is generally incompatible with park values and is contrary to the concept of national parks as protected natural areas.*

In order to protect significant values of the park, mining should be excluded from areas of particular scenic, scientific, cultural and historic or archaeological value or of high, or potentially high, public use.

Prospecting and exploration may be acceptable depending on the scale of the proposed operation, its potential impacts, and that consent to full mining is not implied.

Before a decision can be made on prospecting, exploration and mining proposals the conservation values of the application area and the nature of the operation, including downstream effects, must be fully evaluated. The normal departmental process also involves consultation with Poutini-Ngai Tahu. If an access arrangement is entered into suitable conditions will be sought, when necessary, to ensure that any operations will have minimal adverse effect on park values and that appropriate bonds and insurance cover are allowed.

- * *At time of publication of this plan a Bill to legislate against mining in national parks, certain reserves and other conservation areas was being drafted. If enacted it would alter considerably the approach to mining in national parks.*

The Authority, invites public comment on applications for access arrangements through a process that is facilitated by the local Board. These submissions must be taken into account in the final decision on consent to an access arrangement and on any conditions to be imposed.

Mining operations require monitoring to ensure conditions are being met and the operation is within the approved work programme. This is the responsibility of the Department of Conservation on behalf of the Minister.

Rehabilitation must be undertaken concurrently with the operation and to a standard consistent with park values. The rehabilitation programme should be detailed with the application.

Environmental assessment procedures will be required for all applications for access arrangement. All costs associated with the processing of applications and monitoring operations will be fully recovered by the department from the holder of an access arrangement.

In assessing the implications of the proposed Pike River Coalfield development in relation to the proposed national park, the NPRA concluded that: "provided any final mining proposals for the Pike River Coalfield show significant economic benefits for the country as a whole and the region in particular, and subject to adequate environmental planning and safeguards, the NPRA will accept the development of the field within the boundaries of the park if it is established".

"In such a situation, while it would strongly prefer to see access and coal transport developed to the east, if detailed investigations prove coal transport to the west to be absolutely necessary for successful development of the field, the NPRA accepts that consideration will need to be given at that time to determining an environmentally acceptable method and route of transport westward through the head of the Punakaiki River valley. The Authority does not believe transport by slurry pipeline (or other means) to the northwest through the body of the proposed park to be an acceptable option."

No mining in the petrel colony can be allowed as there are no methods of mining which could be tolerated by the birds. The department will seek to have access to the Westland Petrel Special Area prohibited for mining pursuant to S.62 of the Crown Minerals Act. It will also undertake to set conditioned guidelines for mining operations on adjoining land which will seek to ensure the protection of the petrels and their habitat.

Liaison will be maintained with the Ministry of Commerce, or their successor, in respect of all aspects of the management of Crown owned minerals in the park.

5.2.25 SHINGLE AND ROCK REMOVAL

- * TO PERMIT LIMITED SHINGLE AND ROCK REMOVAL FOR THE ESSENTIAL MAINTENANCE AND CONSTRUCTION OF BULLOCK CREEK ROAD;
- * TO UTILISE SMALL QUANTITIES OF SHINGLE AND ROCK FOR THE MAINTENANCE AND CONSTRUCTION OF TRACKS AND OTHER RECREATIONAL FACILITIES WITHIN THE PARK;
- * TO CONSIDER EACH APPLICATION FOR THE REMOVAL OF SHINGLE AND ROCK FOR OTHER PURPOSES ON ITS MERITS THROUGH THE PROCEDURES OF THE NATIONAL PARKS ACT.

Explanation

The rivers of the park are a source of shingle, sand and rock which could be used on adjacent minor roads and tracks. The traditional sites for the recovery of this shingle are, however, outside the park boundaries, except for a small quantity from Bullock Creek which is used on the Bullock Creek road. Shingle and rock extraction has an impact on water quality although usually only temporarily. Access to the river bank can also be damaging, especially if heavy machinery is used. In addition the rivers are not known for large bed loads and, therefore, removal of large quantities of gravel could have upstream and downstream effects on river bank stability. Furthermore, large scale extraction from rivers decreases the supply to the foreshore, therefore potentially contributing to weeds and coastal erosion. However, the use of local materials can minimise the introduction of material not naturally occurring in the park.

There exists a limited demand for shingle and rock for use on Bullock Creek road, tracks and other recreational facilities which could be met by utilising replenishable material from within the park. The department will respect the traditions of Ngai Tahu and the conflict identified between Takaroa and Tane the children of Raki and Papatuanuku. As a consequence material from the realm of Takaroa (i.e. sand from the beach) will not be used in works associated with the realm of Tane (i.e. walks and tracks in the forest).

In the case of material for roading or other purposes the permission of the Regional Conservator, through a licence or lease under the National Parks Act, is required before any material can be removed. There are existing quarries outside the park adjacent to State Highway 6 which can cater for highway maintenance (see Policy 5.3.7). The demand for material, therefore, from within the park for the highway is regarded as being very low. It is not considered that the use of limited quantities for track construction within the park has much effect on active river beds. The concept of minimal impact and risk will be adopted for all proposals to remove shingle and rock.

5.2.26 INSTALLATION OF UTILITIES

- * TO PERMIT THE INSTALLATION OF PUBLIC UTILITIES AND ASSOCIATED STRUCTURES ON LAND WITHIN THE PARK ONLY WHERE THEY ARE SHOWN TO BE IN THE PUBLIC INTEREST AND SITES OUTSIDE THE PARK ARE NOT AVAILABLE;
- * WHERE NETWORK UTILITY OPERATIONS ARE ALLOWED IN THE PARK TO RELATE PERMITTED DEVELOPMENT TO THE DESIGN CRITERIA;
- * TO RECOVER ADMINISTRATION COSTS AND SET APPROPRIATE RESOURCE RENTALS AND BONDS AS NECESSARY.

Explanation

The cooperation of the West Coast and Buller Electric Power Boards, broadcasting authorities, network utility operators and local authorities will be sought in the planning stages of the future alignments of their facilities. For developments of a large scale Environmental Protection and Enhancement Procedures will be used. Every effort will be made to have domestic services such as telephone cables and powerlines, placed underground (GP #31).

Roading to communication facilities will not be permitted. Therefore developments must be capable of construction and maintenance by foot or by helicopter. Solar power with standby batteries will be preferred for these facilities, and where electric supply is necessary it may be required to be placed underground.

The placement of survey monuments will be constrained to permanent ground marks. Beacons erected for particular projects should be removed when these projects are complete. Minimal clearing of vegetation will be permitted and will be carried out under the supervision of the Regional Conservator or appointee.

Where possible installation of utilities will avoid the skyline to minimise impact on landscape and scenic values. Co-location of utilities on the same site will also be sought. In line with departmental policy all reasonable costs incurred through processing applications for installation of utilities will normally be recovered. A resource rental may also be charged for site occupation. Also, a bond may be set to cover detrimental operation and removal.

5.2.27 HYDRO-ELECTRIC POWER

- * TO OPPOSE THE CONSTRUCTION OF HYDRO-ELECTRIC POWER STATIONS AND ANCILLARY FACILITIES WITHIN THE PARK.

Explanation

It is considered, as a general principle, that industrial development is incompatible with the philosophy and natural state of national parks. The development of hydro-electric facilities would require the consent of the Minister of Conservation, or the land would have to be removed from the park by act of parliament (GP #30).

There are no firm plans for large or small scale power schemes within the park.

Small scale hydro-electric development, however, remains a possibility in the region, although most streams and rivers in the park present severe practical problems associated with steep gradients, highly variable flow rates and in some cases transport of large amounts of detritus. An additional problem is the potential loss of water through caves and karst aquifers. This complicates hydro-development in the limestone canyons and other karst catchment especially in terms of economics.

The Ministry of Commerce has described two alternative schemes based on the Tiropahi River as being possible. However, the "desk-top" level of investigation was acknowledged as being minimal and more detailed field-based geotechnical investigations would be required to accurately evaluate the schemes' viability.

Proposals to dam rivers or abstract waters in or adjoining the park will be considered on their merits. It should be recognised that any proposals for hydro-electric development which could interfere with the natural quantity or quality of park waters, significantly adversely affect the recreational use of the area, downgrade the Ngai Tahu states of waters (see Policy 5.1.11) or result in removal of areas with unique and distinctive qualities will be opposed. At the earliest possible stage proponents of such proposals will be directed to areas which do not affect the park. All proposals will be subject to the Environmental Protection and Enhancement Procedures.

5.2.28 MILITARY EXERCISES

- * TO PROHIBIT LARGE SCALE MILITARY EXERCISES WITHIN THE PARK;
- * TO PERMIT SPECIALISED TRAINING OF MILITARY PERSONNEL IN THE PARK WHERE THE EFFECTS ON OTHER VISITORS ARE MINIMAL AND WHERE THERE WILL BE NO DAMAGE TO PARK VALUES.

Explanation

The department has an agreement with the Armed Forces to permit the use of the conservation estate by military personnel in return for assistance with certain difficult management problems (e.g. fire control, engineering).

However, large scale military exercises are generally accepted as being incompatible with the principles and values of national parks. Certain areas within the park may be available for training in particular skills such as map reading, navigation and climbing or for specific exercises where it is of benefit to management such as track construction (GP #32). In these cases, authorisation may be given where adequate supervision is available and the activity does not cause impairment of park values or disadvantage the opportunities of other visitors. As a general rule the same management controls will apply to military personnel as those relevant to recreational visitors.

5.3 ADVOCACY

5.3.1 MANAGEMENT PLANNING

- * TO COLLECT RESOURCE INFORMATION AND OTHER PLANNING DATA RELEVANT TO THE MANAGEMENT OF THE PARK;
- * TO CONSIDER MANAGEMENT POLICIES IN TERMS OF NEW INFORMATION ON A CONTINUOUS BASIS AND AMEND AS NECESSARY;
- * TO REVIEW THIS MANAGEMENT PLAN NOT LATER THAN TEN YEARS FROM ITS DATE OF APPROVAL;
- * TO ESTABLISH AND MAINTAIN DEVELOPMENT GOALS AND OBJECTIVES THROUGH THE PREPARATION OF STRATEGIES RELATED TO SPECIFIC MANAGEMENT ACTIVITIES.

Explanation

For good management of Paparoa National Park to continue, it is essential that information about the natural features of the park is collected, collated and analysed. The gathering of data will be undertaken by various agencies and employees of the department, although private research may assist. Research workers will be expected to inform the department of their findings.

In addition to information about natural and cultural history, it is necessary to have knowledge of the demands and needs of visitors, their numbers and means of travel and accommodation. From time to time investigations into these and related matters will be undertaken.

The National Parks Act 1980 requires that management plans are amended or reviewed to take account of increased knowledge or changed circumstances. Members of the public are encouraged, at any time, to submit comments or suggestions to the department which may assist or improve the management of the park. Appropriate amendments will be made to the management plan as considered necessary using the process as outlined in the Act (GP #2, 5).

The Conservation Management Strategy for the West Coast will be prepared by 1995. Preparation will acknowledge and take account of this management plan.

5.3.2 PROMOTIONAL ACTIVITIES

- * TO RECOGNISE THE SIGNIFICANCE OF THE PARK TO THE LOCALITY, THE REGION AND THE NATION;
- * TO PROMOTE THE PARK INTERNATIONALLY AS AN INTACT LOWLAND FORESTED KARST ECOSYSTEM;
- * TO PROMOTE THE PARK AS A PLACE FOR THE BENEFIT, USE AND ENJOYMENT OF THE PUBLIC;
- * TO PROVIDE FOR PROMOTIONAL ACTIVITIES IN THE PARK THAT ENCOURAGE ITS PROTECTION AND ENRICH VISITOR APPRECIATION OF THE PARK AND ITS FEATURES.

Explanation

Promotional activities include sporting events, open days, summer festival events and promotion associated with formal events such as conferences based within the park.

Paparoa National Park presents a significant opportunity in this regard due to:

- the character of the park as a protected area of lowland New Zealand in a near natural state;
- the nature of the park that provides opportunities for people of varying age and degree of fitness;
- the extent of interest and support for the park throughout New Zealand and abroad;
- the focal point of Punakaiki as a centre from where activities can be operated;
- the Punakaiki Motor Camp providing a staging location for large promotional events.

Promotional activities must be co-ordinated through the Punakaiki Field Centre, and have the prior consent of the Regional Conservator.

Such activities are considered an acceptable use of the park, provided that:

- they conform with all other policies of this plan;
- they do not impact adversely on conservation values of the locality where they are to take place;
- they do not significantly decrease the experience of other visitors to the park;
- they are compatible with national parks principles.

5.3.3 COMMERCIAL PROMOTIONS

- * TO AUTHORISE COMMERCIAL PROMOTIONS IN THE PARK WHERE THEY ARE COMPATIBLE WITH PARK VALUES AND PRINCIPLES.

Explanation

Commercial promotions include production of commercial advertisements, filming for commercial end use, and use of the park environment to promote goods and services. This policy does not relate to commercial concession operations of recreational and tourism services, which is covered under Section 5.2.17 of this plan.

All commercial promotions require to be authorised by the Field Centre Manager based on details submitted by the client.

Approval authorises the type of commercial promotion to take place, the timing and duration of this promotion, and identifies any fees and costs recoverable as dictated by the department's draft Film and Video Concession Fees Guidelines.

It is important that the name of Paparoa National Park, or national parks in general not be used, explicitly or by implication, to promote goods or services other than those that are related to the use and enjoyment of the park itself.

Commercial activities not related to Paparoa National Park may be carried out within the park, provided that:

- they conform with all other policies of this plan;
- they do not suggest that their products are endorsed by Paparoa National Park.

It is acceptable to use the features of the park, within any conditions of approval, to promote appropriate commercial activities which are compatible with national park principles.

5.3.4 PUBLIC RELATIONS

- * TO MAINTAIN A GOOD WORKING RELATIONSHIP WITH LOCAL AND REGIONAL BODIES, OTHER AGENCIES AND INTERESTED PARTIES IN ALL ASPECTS OF MANAGEMENT RELATING TO THE PARK;
- * TO PARTICIPATE IN LOCAL AND REGIONAL ACTIVITIES THAT ENCOURAGE A BETTER UNDERSTANDING OF THE PARK AND CONSERVATION VALUES;
- * TO RECOGNISE THE NEED TO MAINTAIN A HIGH QUALITY PUBLIC RELATIONS PROFILE BY PROPERLY TRAINED, ADEQUATE NUMBERS OF STAFF.

Explanation

The department will work closely with local and regional interests on activities of mutual advantage (GP #3). It will maintain programmes which inform the public of the opportunities the park offers, such as visitor programmes, whilst ensuring that local and regional interests are enhanced.

Every opportunity will be taken to consult and maintain a good working relationship with agencies whose administration or activities may affect or be affected by matters in or adjacent to the park.

Departmental staff will actively discuss with and inform members of the public of all aspects of management relating to Paparoa National Park as appropriate.

5.3.5 BYLAWS

- * TO ESTABLISH AND MAINTAIN A SET OF BYLAWS FOR THE CONTROL AND REGULATION OF PARK USE.

Explanation

Section 56 of the Act makes provision for the Minister to make bylaws that are not inconsistent with the management plan. Bylaws can cover such purposes as the protection of native plants and animals, the safety of the public, access and recreational use, use of vehicles or machinery and the prescription of fines. Bylaws are notified by publication in the Gazette.

A number of bylaws are contemplated under policies 5.1.10, 5.2.9, 5.2.20 and 5.2.21.

5.3.6 ADJACENT USE

- * TO ENCOURAGE THE APPROPRIATE DEVELOPMENT OF COMMERCIAL AMENITIES ON SUITABLE LAND ADJACENT TO THE PARK;
- * TO LIAISE WITH AND SEEK THE COOPERATION OF LANDOWNERS, LOCAL AUTHORITIES AND GOVERNMENT AGENCIES TO ENSURE COMPATIBLE USE AND MANAGEMENT OF LANDS ADJACENT TO THE PARK.

Explanation

Nearly the whole of the park falls in Buller District with a small portion (the south side of the Punakaiki Catchment) lying in the Grey District. Both of these territories form part of the West Coast Regional Council area. Co-operation will be sought from the Council's, government agencies and landowners in an endeavour to ensure compatible use and management of lands adjacent to the park (GP #3).

The creation of Paparoa National Park opens up opportunities for commercial development of amenities to service park visitors on land adjacent to the park. Whilst appropriate development is encouraged by the department it is desirable that it proceeds in an orderly manner and that it does not prejudice the investigation of land for addition to the park. To protect visual and landscape values ribbon development should ideally be avoided and developments be concentrated in the Punakaiki area (from behind Dolomite Point to the Pororari River) and Charleston outside the park. The Buller County District Scheme provides for development in the Punakaiki township with restrictions due to potential coastal erosion and an identified rockfall hazard zone.

In the coastal area there is great potential for adverse impact on park values. Most visitors perceive the coastal area to be part of the park, but the land is mostly outside park boundaries and either freehold or controlled by the local authority. The opportunity to read the landscape's historic and prehistoric past depends largely on the nature of land management outside the park. This is particularly relevant on the coastal sand country of the Barrytown Flats. It is desirable, therefore, to obtain the co-operation of landowners and other agencies to avoid the incidence of activities and developments that could detrimentally affect appreciation of the park, or protection of intrinsic values. State Highway 6 is addressed specifically in Policy 5.3.7.

The department will liaise closely with energy authorities and NZ Telecom to seek to minimise or reduce the impact of cables on landscape character and natural scenic values.

Exotic pine plantation, where adjacent to the park, may potentially become a problem with the spread of wildlings especially in the Tiropahi area. Removal will be advocated by the department to Timberlands (West Coast) Ltd and local authorities.

Bullock Creek Farm, through the provisions of its management plan, will be managed for compatible use and to prevent adverse impacts on the park.

The Punakaiki Motor Camp is an important recreational opportunity and is essential for the benefit and enjoyment of many visitors to the park. The management of the motor camp will be intimately linked with that for the park.

5.3.7 STATE HIGHWAY 6

- * TO RECOGNISE THAT STATE HIGHWAY 6 IS AN ESSENTIAL HIGHWAY LINK AND HAS AN IMPORTANT ROLE IN FACILITATING ACCESS TO THE PARK;
- * TO MAINTAIN CLOSE LIAISON WITH TRANSIT NZ REGARDING ALL WORKS NECESSARY TO PROTECT, MAINTAIN OR IMPROVE STATE HIGHWAY 6, AND IN RELATION TO ANY PARK FACILITIES OR DEVELOPMENTS WHICH MAY IMPINGE ON THE HIGHWAY OR SAFETY OF ROAD USERS;
- * TO RATIONALISE THE STATE HIGHWAY 6 LEGAL ROAD BOUNDARY THROUGH THE PARK;
- * TO CONSIDER THE IMPROVEMENT, MAINTENANCE AND POSSIBLE REALIGNMENT OF STATE HIGHWAY 6 TO A LEVEL NECESSARY FOR ITS SAFE USE IN TERMS OF THE GENERAL POLICY FOR NATIONAL PARKS AND ROADING GUIDELINES;
- * TO SET APART ANY APPROVED ROAD REALIGNMENT AS STATE HIGHWAY AND TO ENSURE APPROPRIATE REHABILITATION OF SURPLUS HIGHWAY AND ITS INCORPORATION INTO THE PARK;
- * TO INVESTIGATE AND DEVELOP APPROPRIATE PEDESTRIAN ACCESS FROM THE PUNAKAIKI RIVER TO TRUMAN TRACK.

Explanation

The scenery along State Highway 6 is most impressive where it passes through the park and the highway is one of the main ways that visitors experience the park. It is an important recreation/tourism route, part of the West Coast Heritage Highway, and a significant commercial link between Westport and Greymouth.

It is therefore important that the highway be maintained to meet the needs and safety of the travelling public and park visitors in a way that acknowledges national park values. Close liaison with Transit NZ will be promoted to maintain or improve the present standards in accordance with the Roding Guidelines and thus develop an inter-organisational management regime.

Agreement will be sought on such matters as vegetation trimming, weed control, signs, stockpiles, dump sites and taking of road material (see Policy 5.2.25). There is also a need for the department to consult with Transit NZ where park facilities or developments such as walk and track entrances (see Policy 5.2.7) and picnic sites (see Policy 5.2.8) may impinge on the state highway.

The existing state highway is not situated within the boundaries of the legal road in all places. The department and Transit NZ will endeavour to rationalise the legal status of the highway and the park during the first five years of this plan's term (see Policy 5.1.4.). In consultation with the Regional Conservator essential maintenance and improvements of State Highway 6 within the park will be considered in terms of Section 55(2) of the National Parks Act 1980 and the General Policy (GP #19). Approval for the construction of highway may only be given where:

- feasible options for realignment or reconstruction cannot be accommodated within an existing road reserve;
- the Environmental Protection and Enhancement Procedures are satisfied;
- the proposal is supported by the Board as being in the best interest overall of the park;
- there is no significant detrimental effect on uncommon or threatened plant or animal species or their habitats, recognised ecologically sensitive areas of scientifically significant ecological systems, identified cultural values to the iwi, recognised historical features, or high landscape or scenic values;
- redundant road reserve will be rehabilitated to a reasonable and appropriate standard.

Should approval be obtained setting apart of former national park land as road reserve and addition of any redundant road reserve to the park then follows. The department will assist appropriate rehabilitation by Transit NZ through provision of landscape design advice.

Increasing numbers of visitors are using the highway to gain access to Punakaiki village, Dolomite Point, Truman Track, Lower Pororari River Track and the Punakaiki River end of the Inland Pack Track. The resulting safety problem will be addressed by the department in conjunction with Transit NZ and Buller District Council through the provision of appropriate pedestrian access. Access will be in the form of a short walk suitably routed using national park land and road reserve where necessary between Punakaiki River and Truman Track (see Figure 3).

Any agency undertaking works or constructing facilities along the highway, that may have an impact on the park, will be requested to confer with the department (see, for example, Policy 5.2.26 Installation of Utilities).

State Highway 6 between Punakaiki River and Bullock Creek is gazetted as a Limited Access Road by the Transit New Zealand Authority. This facilitates the maintenance of access to the state highway, by Transit NZ, at a level that is least detrimental to the efficiency of the highway and the safety of the road user. Access roads joining State Highway 6 where it is a Limited Access Road are required to be individually licenced.



5.4 IMPLEMENTATION

5.4 IMPLEMENTATION

A number of specific actions are intended to be taken to implement the management policies. All tasks undertaken by the department are promulgated through the corporate planning and business planning processes. A business plan is prepared annually for the West Coast Conservancy and it details personnel and operating expenditure required to carry out tasks for that financial year, including those actions required in terms of this management plan.

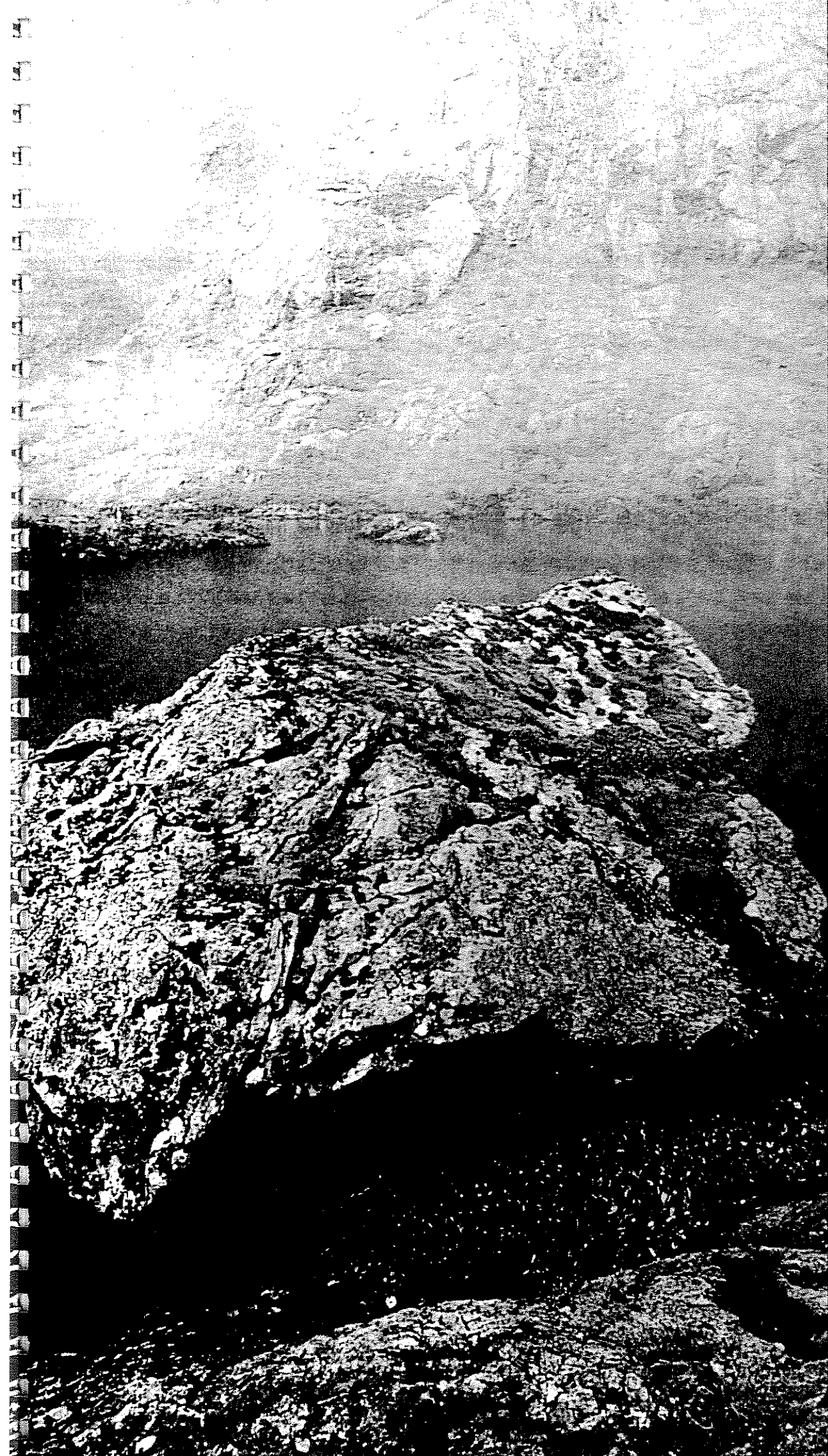
At the operations level strategies will be prepared within two years of the plan becoming operative that address more fully interpretation, and research, survey and monitoring. Similarly a Recreation Operations Management System will be implemented to guide recreation development in the park. Concept plans are an additional management tool and will also be prepared for a number of cave systems, as it is not possible to address the issues unique to those caves in a meaningful manner within this management plan. These concept plans will be prepared in consultation with key recreation groups and concessionnaires. The culmination of this multi-tiered planning process are prescriptions that detail the budget, timeframes and methods to complete each task.

A number of other procedures are also proposed to be invoked by this plan. An Order in Council is required to declare the petrel colony as a specially protected area. To complement this classification the Crown Minerals Act 1991 and the Civil Aviation Act 1965 will be utilised to enable the colony to be exempt from mining and to create a restricted airspace respectively.

Bylaws are also required to provide the necessary authority to implement a number of provisions outlined in the plan. These will be prepared as a priority.

It is important that the management policies for Paparoa National Park are responsive to changing needs. Amendments to the plan will be considered, as appropriate, and will be undertaken in accordance with the National Parks Act 1980. To facilitate the eventual review of the plan ongoing research is essential to augment the resource data base. In relation to this it is proposed to instigate the Limits of Acceptable Change concept, as a planning process, throughout the term of this plan.

This plan encapsulates the agreed direction for management of Paparoa National Park. It forms a "contract" between the three partners the Crown (Department of Conservation), the public (West Coast Conservation Board) and the iwi (Ngai Tahu). The partners will monitor the plan's general implementation.



addenda



GLOSSARY

Cirque - Natural amphitheatre generally formed by glacial processes.

Doline - A closed circular or oval depression produced by solution or collapse.

Fossil - Faunal and floral remains or imprints (bones, shells, plant material, etc) embedded in consolidated rocks (limestones, sandstones, mudstones etc) of relatively old geological age.

Interstratal Karst - Karst strata sandwiched between rocks of other material.

Gryke - Solutional 'channels' developed along joints or cleavage planes. They are usually long and straight and often form networks.

Karren - A comprehensive term for a variety of forms of small-scale fluted solutional sculpture.

Karst - Terrain with distinctive hydrology and landforms arising from a combination of high rock solubility and well developed secondary permeability. Karst features may include dolines, sinking streams, blind valleys, dry valleys, gorges, caves, large springs, grykes, karren, potholes (tomo) and speleothems.

Manawhenua - Power associated with the possession of lands.

Mauri - The power which permits living things to exist in their own realm.

Polygonal Karst - Karst landform tightly packed with dolines adjoining each other in an "eggbox" like appearance.

Pothole - A vertical shaft open to the surface which may, or may not, give access to a cave system.

Poutini-Ngai Tahu - Poutini-Ngai Tahu are the descendants of the Ngai Tahu taua that completed the conquest and subsequent settlement of the lands and coasts of the Tai Poutini (now known as Westland).

The taua was led by the Kati Waewae rangatira, Tuhuru.

Poutini-Ngai Tahu kaumatua alive in 1848 were established by the Maori Land Court in 1925 and their names are recorded in the "Ngai Tahu Blue Book".

The descendants of those 1848 kaumatua are still known collectively today as "Poutini-Ngai Tahu" and they are the people guaranteed the exercise of "tino rangatiratanga" under Article II of the Treaty of Waitangi.

Sink/Sinkhole - The point where streams sink in dolines or blind valleys.

Speleothem - Stalactites, stalagmites and other secondary mineral deposits formed in caves.

Subfossil - Faunal remains (bones, shells, etc) present in or on unconsolidated sediments (gravel, sand, mud, etc) of relatively recent geological age. A shell from a Maori midden is a subfossil.

Syncline - A trough-shaped fold in rock strata. In the Barrytown Syncline the trough is formed between eastern and western flanks of exposed limestone. Contained between them is the basin on interstratal karst.

Talus - Sloping mass of rock fragments accumulated beneath cliff faces.

Taiapure - Estuarine or coastal waters set aside under the Fisheries Act 1983 that have special significance to any iwi or hapu either as a source of food or for spiritual or cultural reasons.

Tino Rangatiratanga - Power and authority

Tomo - Natural opening or entranceway. Colloquially this has now been adopted, somewhat erroneously, to be synonymous with pothole.

Tupuna - Ancestors

Dialectal Note

In the dialect of Ngai Tahu "k" sometimes replaces "ng", for example Raki (Rangi), Takaroa (Tangaroa).

APPENDIX 1

**List of General Policies for National Parks
(National Parks and Reserves Authority)**

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- Appendix A: Management planning guidelines
- Appendix B: Department of Lands and Survey concessions policy in New Zealand national parks
- Appendix C: Roading guidelines
- Appendix D: IUCN definition of a national park

APPENDIX 2

Classification System for Public Use of Caves and Karst

The following classification has been extracted from the department's draft General Policy and Guidelines for Cave and Karst Management. Cavernous/karst areas, caves or passages within caves may be classified open, limited, restricted or tourist access using criteria outlined below:

Open Access

This is appropriate where features may not be of high scientific interest but of scenic, educational or recreational value, and can withstand intensive visitor use. Open to all user groups with no restrictions except those needed for safety and basic rules for the respect of the resource. Note that this category can include karst areas/caves with features of high scientific interest which are not vulnerable to damage by general recreational use.

Limited Access

This is appropriate where limited or controlled recreational use will not cause an unacceptable level of damage to the ecosystem or geological or other features being protected. Access may be controlled by permit or other forms of consent mechanism by which party numbers, frequency of use, type of activity and any special conditions may be specified.

This category may include potential "Limited or Restricted Access" situations for newly-discovered caves or passages. However, it is desirable that such an interim classification does not apply for longer than twelve months.

Restricted Access

This is appropriate where there are specific habitat requirements for rare or endangered species or where there are features of high scientific importance, or which are unique or of outstanding aesthetic value and at risk. Access will be controlled by permits or other means of consent which will be issued for approved purposes.

This will be used only where the features are vulnerable to uncontrolled recreational use and are considered so important or outstanding that no damage can be tolerated. Restricted Access caves or cave passages may be secured against unauthorised entry.

"Limited" and "restricted" categories may include potential "tourist access" caves.

Tourist Access

This is appropriate where caves are fully developed for guided visits by the general public. Charges for admission may be fixed and the times of admission regulated.

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