



Kopututea Co-Management Plan

December 2012

This document is the outcome of a co-management process between the Kopututea Trustees and Gisborne District Council. The Trustees are the registered proprietors of the Kopututea title and have made the site accessible to the community and visitors.

Funding the development and maintenance of this site currently relies on the Trustees. However Council recognises that the whole community gains by having access to Kopututea and, therefore, have made funding available through Council's Ten Year Plan process (under the Local Government Act 2002).

The Kopututea Co-Management Plan was approved by Council on *20 December 2012*

And the Kopututea Trust at its meeting on

This plan is now an operative Co-Management Plan for the area known as Kopututea.

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Preface

In 1944 an area of land (69 acres and 1 rood and 38.9 perches) along the foreshore of the Poverty Bay was taken by the Cook County Council under the Public Works Act 1928 for roading purposes to provide a marine drive.

After the construction of the road, an area of 34 acres 3 roods and 30 perches remained which constituted a strip of land between the roadway and the sea (approximately four acres of this area was land that has originally been in Maori ownership and approximately 30 acres was unclaimed accretion).

As surplus road, and no longer required for that purpose, it was formally closed on June 1972 and thereupon became vested in the Crown (subject to the Land Act 1948).

On July 12 1972 a change of appellation was registered against the proclamation notice by the Department of Lands and Survey and the area was named - sections 36 and 37 Block IV Turanganui Survey District.

It was recommended on 29 July 1975:

“that an application be made to the Maori Land Court under Section 436 of the Maori Affairs Act 1953 to revest the land in the former Maori owners or their descendants.”

In reply to a question in the House on 23 June 1978 the Minister of Lands said:

“I have received verbal and written assurances from the trustees that an arrangement acceptable to the Crown, local authority and the Maori owners can be made for the land to continue to be available to the public for recreation and for access to the beach”.

The application was considered and granted by the Maori Land Court at Gisborne on 3 August 1978.

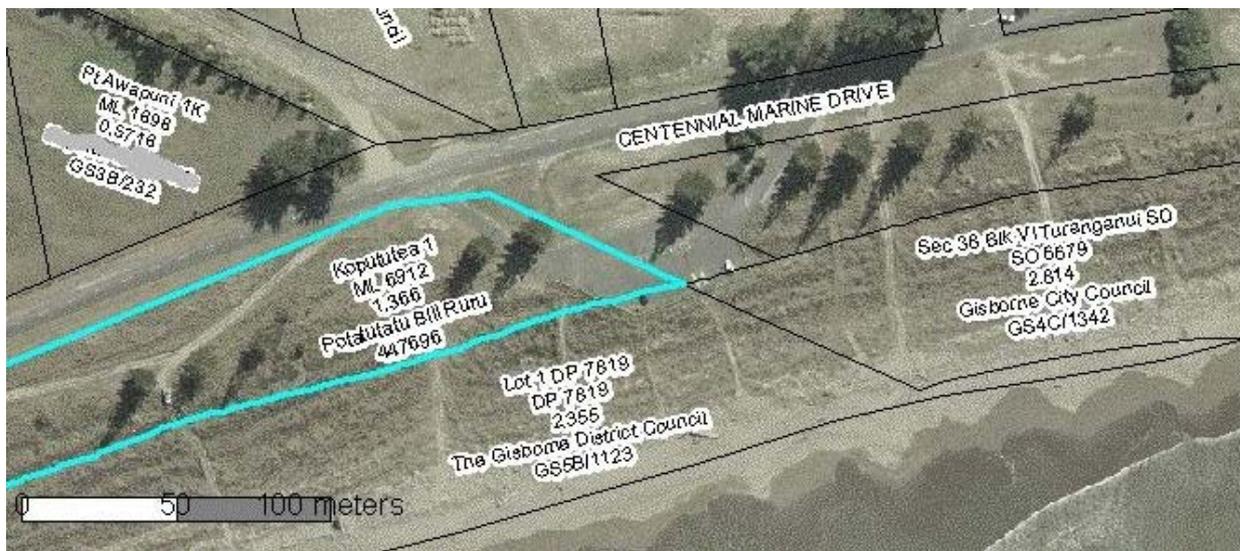
Today the site is known as Kopututea.



PART ONE - Introducing Kopututea

1.1 Description of Kopututea

Kopututea is a stretch of dune landscape stretching for seven kilometres along the Pacific Ocean, south of the developed area of Gisborne City towards Makaraka and Manutuke to the mouth of the Waipaoa River. This open space stretches as far as the eye can see, and has an appearance of desolated dune wilderness. Very little development has occurred along the dunes, other than one formed carpark (see below), partially located within Kopututea, at its most eastern boundary, and many informal parking areas and vehicle access tracks.



This area is in private ownership, but has kindly been made available to the public for many years, and will continue through this co-management plan and the relationship between Kopututea Trustees and Gisborne District Council.

Kopututea is easily accessible from its coastal margin and the public road that runs along the length of Kopututea's northern boundary. The 'wilderness experience' achieved at this location involves the wider 'borrowed landscape' including the regionally significant landscape of Te Kuri o Paoa, otherwise known as Young Nick's Head, the harbour, the backdrop of Titirangi (Kaiti Hill), the headland of Tuamotu Island and the Awapuni lands to the landward side of Centennial Marine Drive. Mature Norfolk Pines are an iconic feature of the area, consistent with Norfolk Pines along other coastal areas of the East Coast (such as Wainui, Makorori and Turihaua Beaches).

The area from Pacific Street to the mouth of the Waipaoa River has been integral to the landscape surrounding Poverty Bay. The abundance of seafood at the Waipaoa River mouth and its proximity to the estuarine Awapuni (now reclaimed) and Te WheroWhero lagoon has meant Kopututea has had an influence within the history of both tangata whenua and post-European settlement.

Kopututea is a popular recreation destination and provides for a range of recreational use including walking, running, rest areas, driftwood collectors, dog exercising, and access to the coast and river for surf-casting, surfing, collecting kai moana and other water activities. Recreation also occurs along Centennial Marine Drive, adjoining Kopututea. The flat terrain and minimal vehicular traffic means this area is ideal for cyclists, runners, and dog exercising from vehicles.

Memorandum of Understanding between Gisborne District Council and Kopututea Trust

Council and the Trust work together through a number of processes relating to the use and management of Kopututea, including resource consents (Council has for sand extraction and driftwood relocation) under the Resource Management Act 1991 and the preparation of a co-management plan (still to be finalised and approved by Council and the Trust). There was intent from both parties to enter into a Memorandum of Understanding in the late 1990s but this was not followed through. In November 2012 a report went to Council recommending it enter into a Memorandum of Understanding with the Kopututea Trust in recognition of the goodwill of both parties to work together towards future management of Kopututea. The Memorandum of Understanding acknowledges the principles of both parties and provides some certainty regarding public access and use, but is not legally binding.

1.2 Legal Description

Computer Freehold Register - Identifier	Legal Description	Area	Status	Background
447696	Kopututea 1 Block	1.3660 ha	Maori Freehold Land	Section 36 Block IV Turanganui Survey District
447696	Kopututea 2 Block	12.7730ha	Maori Freehold Land	Section 37 Block IV Turanganui Survey District

1.3 Location Map – Kopututea and Gisborne City



PART TWO – Resource Inventory

2.1 Locality and Access

The area of Kopututea is comprised of sand dunes and is located approximately in the middle of Poverty Bay, 5 km south west of Gisborne on the seaward side of Centennial Marine Drive.

On the landward side of the road lie pastoral land and approximately 6 residential properties. The reserve is within cycling distance of the city and is within close proximity for destination recreation such as fishing, dog exercising, and running.

2.2 The Coastal Landscape

The coastal landscape of Kopututea is the result of interacting natural and cultural forces. The area has a gentle undulating dune landscape. Kopututea is the result of accretion and is attached to a narrow strip of tidal flats which separate from the open sea by foredune, storm beach and road. The tidal flat, now reclaimed, is commonly known as Awapuni Lagoon.

To the south the area is contained by the principle river of the locality, the Waipaoa. The Waipaoa River is 108 km long from the headwaters to the river mouth and has a catchment size of 2205 square km. To the northeast the Waikanae Stream rises in the swamps and is replenished from the unconfined groundwater aquifer beneath known as the Te Hapara Sand Aquifer. It joins the Turanganui River and is not connected to the Waipaoa River.

The groundwater flow of the aquifer runs toward the ocean fully recharged by rainfall and there is an annual seasonal fluctuation of about one metre between the winter high and the summer low. The quality of the ground water is variable with higher salinity concentrations found near the coast. In the vicinity of Kopututea the aquifer is susceptible to saline intrusion due to long dry periods during summer and pumping stress.



2.3 Climate

Rainfall is approximately 1250 - 1500 millimetres per annum. It is not well distributed throughout the year. Wet winters can often be followed by drought conditions during the summer. Much of the rain comes in heavy falls and may last for several days. The prevailing wind is north-west which is normally warm and dry after crossing the ranges to the west. Winds from the north-east and south-east are also common but the region is below the national average for windiness. The summer sea breeze from the south-east can be uncomfortable for people.

The area is warm in summer and mild in winter. Mean temperature for July is 9 degrees centigrade with a mean daily maximum of 14 degrees centigrade. Sunshine is approximately 2200 hours per year. These factors make Kopututea a pleasant location for coastal recreation.

2.4 Soils

This foredune has been built up by the sea over the last 65 - 75 years. In its natural state the land is hummocky and ridgy. The dunes run parallel to the coastline.

The sands of the second and backdune on the land on the seaward side of Centennial Marine Drive are stabilised by a cover of weeds, sand grasses and shrubs including Spinifex (*Spinifex Sericeus*), Harestail, Catsear, Melilotus, Sand Couch, Indian doab, and Pampas.

The soil on the foredune under natural cover has a mat of dead roots, underlain by a horizon of pale brown sand, held together by a strong fibrous mat of both living and dead roots. Underneath is loose grey sand, in which roots penetrate to about 30 cm.

Opoutama sand which comprises the dune soil of the second and backdune dries out extensively in the summer and productivity is limited more by deficiencies of moisture than by mineral nutrient deficiency. In the winter the soil drains freely and the consolidated sands provide a strong firm surface. On the backdune near Centennial Marine Drive a ribbon planting of Norfolk Pines occurred some 35 years ago. While not considered wholly appropriate to the site they have provided some scale and relief to the dune landscape.

At the time of European settlement the vegetation on the beachlands which extended nearly 500 metres inland and was mainly manuka and bracken fern with some kanuka. In the swamps which were small but numerous raupo, sedges and toetoe flourished.



2.5 Vegetation

The sand dune vegetation has a moderate degree of diversity and native species. The face of the foredunes is dominated by spinifex. Other sand binders, such as Haretail, are vigorous with a dominance of buffalo grass in some areas forming turf to the front edge of the dune. Scipoides, Haretail, Catsear, spinifex and Melilotus occur in the hollows and are joined by sand couch and Indian doab on the second dune. Plantings on the dune system include the rapidly spreading pampas (*Cortaderia selloana*), Norfolk Island Pine and Casuarina.

The effect of human impact on vegetation, and subsequently the integrity dune system is highly evident at Kopututea. The numerous access points along this coastal stretch of land has encouraged and highlighted the problems of sand blowouts, which is proliferated by southerly on-shore winds.

The grazing of domestic stock and the presence of rabbits and hares have also significantly impacted remaining plant species.

A restoration project at Kopututea would need to realise that significant changes in human use and behaviour are required to effect sustainable management of this coastal environment.

2.6 Wildlife

Very little fauna can be found at Kopututea although there are pests, such as hares and rabbits.

2.7 Marine Aspects

Currents: Near East Cape, the main flow of what is known as the East Auckland Current coming southwards through the Bay of Plenty turns north while the rest turns in a clockwise direction round East Cape giving rise to the southward flowing East Cape Current. This warm saline sub-tropical water has a large influence on the coastal hydrology as far south as Cape Turnagain.

Topography and Sediments: The marine shelf slopes gently for some 20 -30 km off shore before dropping off deeply into the deep Kermadec and Hikurangi trenches. The seabed composition is of sand generally out to a depth of thirty metres then turning to mud.

2.8 Recreation Users

Kopututea is a unique area within the Gisborne City with its informal open space and virtual lack of built character. The informality and remote feel of Kopututea is an attraction to the area itself offering unique recreation opportunities. Coastal landscapes such as Kopututea can be subjected to pressure by demand from users for car parking, access and recreation activities. Some activities exert intolerable pressure on the dune system, such as horse riding and motorbike scrambling. Providing for sustainable recreation opportunities requires balancing the demand for recreational use on an unfettered site, with the need to protect the natural and cultural values of the site.

Kopututea is a well-used coastal resource. It's a popular fishing spot (especially by the Waipaoa River mouth), is used for walking, running, and provides access for beach use, surfing and swimming.

Most activities are potentially sustainable or can be confined to more stable areas of the dunes to ensure sustainable use of Kopututea.

Most of the adverse effects are the result of vehicular traffic, either by way of gaining access on to the site via the numerous accessways, or through driving along the dunes using informal tracks. The effects of these activities can be seen down the length of Kopututea from Pacific Street to the river mouth.





PART THREE - Policy Framework

Legislation provides a planning framework for the management, development and use of Kopututea. From national legislation such as the New Zealand Coastal Policy Statement, through to local and regional statutory documents such as the Regional Coastal Policy Statement and Coastal Plan, to Gisborne's Combined Regional Land and District Plan.

The legislation referred to below provides the background to Management objectives and policies for Kopututea in Part Four of this plan.

3.1 Resource Management Act 1991

The purpose of the RMA is to...

"Promote the sustainable management of natural and physical resources to manage the use, development, and protection of natural and physical resources in a way, or at a rate, which enable people and their communities to provide for their social, economic, and cultural well-being and for their health and safety while....

Sustaining the potential of natural and physical resources (excluding minerals) to meet the foreseeable needs of future generations; and

Safeguarding the life-supporting capacity of air, water, soil and ecosystems; and

Avoiding, remedying, and mitigating any adverse effects of activities on the environment (section 5a)".

3.2 New Zealand Coastal Policy Statement

The New Zealand Coastal Policy Statement (NZCPS) is a national policy statement under the Act. The purpose of the NZCPS is to state policies in order to achieve the purpose of the Act in relation to the coastal environment of New Zealand.

The coastal environment has characteristics, qualities and uses that mean there are particular challenges in promoting sustainable management (these relate to Kopututea):

- ▶ The coastal environment varies in nature and extent around the country;
- ▶ most existing towns and cities are in or close to a coastal location;
- ▶ the coastal environment contains established infrastructure connecting New Zealand internally and internationally such as ports and airports
- ▶ natural and physical resources important to the economic and social wellbeing of the nation and communities, such as high quality coastal water, fresh water, renewable energy, and minerals are found within the coastal environment, including areas with high natural character, landscape and amenity values;
- ▶ the natural and recreational attributes of the coast and its attraction as a place to live and visit combine with an increasingly affluent and mobile society to place growing pressure on coastal space and other resources;
- ▶ activities in the coastal environment are susceptible to the effects of natural hazards such as coastal erosion and tsunamis, and those associated with climate change;
- ▶ there is continuing and growing demand for coastal space and resources for commercial activities as diverse as aquaculture and sand mining; and
- ▶ The coast has particular importance to tangata whenua, including as kaitiaki.

3.3 Regional Coastal Environment Plan

Kopututea is within the General Management Area for activities considered in the Coastal Environment Plan. The General Management Area includes that portion of the Coastal Environment that is not within the Port or Protection Management Areas and encompasses the greater proportion of the Gisborne District Coastal Environment.

This Management Area will ensure that use, development and protection of the Coastal Environment is appropriate by ensuring that adequate information regarding any proposed activity is supplied so that the effects of the activity on the Coastal Environment can be determined prior to any decision being made. The precautionary approach to activities, as stated in the New Zealand Coastal Policy Statement, will be given effect in this Management Area and further research and the monitoring of the effects of activities in this area will be a feature of this Plan.

Gisborne District Council applies for two land use consents relating to Kopututea. This includes sand extraction, and land disturbance (locating and storing driftwood above the MHWS).

3.4 Gisborne District's Combined Regional Land and District Plan (District Plan)

The District Plan is one of the main tools for promoting the purpose of the Resource Management Act 1991 within the Gisborne District. The RMA requires District Plans to state the objectives for the district, the policies to achieve the objectives and any rules or other methods to implement the policies (section 75 and 76). The District Plan may also state methods other than rules for implementing policies, such as Reserve Management Plans (section 75 (2)).

The RMA requires Council to have regard to Management Plans as part of its functions and administration of the District Plan (section 74 (2b)). The District Plan considers Management Plans as the primary method for managing use, development and protection of public reserves, and recognises the community consultation process required by the Reserves Act.

Kopututea has a Rural General zoning in the District Plan. This zoning is the most permissive in the District Plan. Although a reserve zoning might better reflect its use, the owners of this land would prefer the zoning to remain rural general, rather than zone reserve which infers the land is public land. The public has access and use of Kopututea at the grace and favour of the owners.

District Plan, Rural Zones, Chapter 21:

General objectives (all rural zones):

- 21.3.1 *Enable subdivision, use and development in all rural zones provided that adverse environmental effects can be avoided, remedied, or mitigated.*
- 21.3.2 *Maintain rural amenity values*
- 21.3.3 *Sustainable management of the life supporting capacity of the soils on the Poverty Bay Flats*
- 21.3.4 *Enable peri-urban living in appropriate areas, and at densities where the adverse effects of this activity can be avoided, remedied or mitigated.*
- 21.3.5 *Locate structures and plant trees in such a manner as not to cause adverse environmental effects across property boundaries.*

General Policies (all rural zones):

- 21.4 *When preparing plans or considering applications for plan changes, resource consents or designations in all rural zones regard shall be given to the following general policy as well as any specific policy relating to the zone:*
 - *Effect of the activity on the natural landform characteristics;*
 - *Effect on significant indigenous vegetation and significant habitats of indigenous fauna with particular references to Chapter 4 – Natural Heritage;*
 - *Effect on biodiversity, water quality, land stability and erosion with reference to Chapter 4 – Natural Heritage and Chapter 6 – Land Disturbance;*
 - *The location, scale and nature of the proposed activity and its effect on the balance of the land and on adjoining properties;*
 - *Alternative methods and locations available to carry out the works or activities;*

- *Physical constraints to the site such as separation by rivers or roads, site configuration and layout;*
- *Any adverse effect that the activity may have on existing rural activities;*
- *The shape, size and location of lots to be subdivided and any adverse effects they may have on amenity values;*
- *Whether covenants, buffer zones or separation distances between activities would assist in mitigating adverse environmental effects.*

3.5 Local Government (Rating) Act 2002

Kopututea is exempt of rates under the Local Government (Rating) Act 2002, as it is categorised under the Act as “non-rateable land”:

“Land that is –

- a) Owned by a society or association of persons (whether incorporated or not); and
- b) Used for conservation or preservation purposes; and
- c) Not used for private pecuniary profit; and
- d) Able to be accessed by the general public”.

(Schedule 1, Part 1, Section 3).

3.6 Walking and Cycling Strategy for the Gisborne District

This Strategy includes actual and potential walking and cycling networks and facilities, as well as actions that are designed to increase pedestrian and cyclist numbers. The Strategy includes the existing informal walkway along the length of Kopututea, and the existing and proposed sections of cycleway (and possible cycleway) adjoining Kopututea along Centennial Marine Drive.





PART FOUR – Aim, Objectives and Policies

Management Aim:

To protect and enhance the natural integrity of Kopututea while providing for passive recreation and access to the coast.

OBJECTIVES AND POLICIES

The objectives and policies for Co-Management of Kopututea have been developed to ensure the management aim can be realised.

4.1 Environmental Objective

To protect and enhance the natural integrity of Kopututea through best dune care and reserve management practises; including dune planting, weed and pest control, and litter management.

4.2 Environmental Policies:

4.2.1 New Planting Policy

All new planting will include plant species appropriate for the dune environment, such as dune grasses along the foredune, with Pohutakawa and other appropriate indigenous species planted along the backdunes.

Discussion

The foredunes are well established with mainly Spinifex. Further Pingao grasses could be established to encourage biodiversity at Kopututea. Planting of sand binding grasses such as Spinifex and Pingao could be planted along denuded areas, especially those areas that will revert to dunes once vehicle accessways have been closed. Planting will not only assist in dune accretion at these areas, but will reduce sand blowouts (wind erosion).

Vegetation of the Kopututea back dune areas will need to be undertaken with the knowledge that success will be dependent on working with soil properties and coastal climatic conditions that are particularly unfavourable for plant growth.

Trial to date have highlighted at least 10 species with high survival and growth rates, these include:

- flax (*Phormium tenax*);
- Tauhinu (*Cassinia leptophylla*);
- Pohuehue (*Muehlenbeckia complexa*);
- sand coprosma (*Coprosma acerosa*);
- Pohutukawa (*Metrosideros excelsa*);
- Houpara-coastal five finger (*Pseudopanax lessonii*);
- Ngaio (*Myoporum laetum*);
- Karo (*Pittosporum crassifolium*);
- Taupata (*Coprosma repens*);

The scale envisaged for indigenous species rehabilitation is considerably smaller than that of sand stabilisation projects. This is due to the challenges that are faced when establishing these indigenous plant communities on backdune sites, due to the range of sites and microclimates and the dynamic nature of plant communities. Research to date has highlighted that there are major problems for revegetation of exposed sites.

Backdune planting is to be planted with native species with **pohutukawa (*Metrosideeros excelsa*)** being dominant.



Pingao grass

(Photo: courtesy Bay of Plenty Regional Council, Coast Care Brochures)

Planting guide for Pingao Grass

Pingao grass (Desmoschoenus spiralis) mother plants should be sought from an appropriate source. The mother plants should be broken up so that each juvenile has at least five tillers. Planting should follow the contour of the dune and spacing between the plants should be at least 600 mm. A dressing of urea will be necessary in year 1 to boost growth.

Pingao is an endemic sand-binding plant found growing on or near coastal foredunes. It is one of four natural fibres used extensively by Maori for weaving. In pre-European times Pingao was widespread on foredunes in the North and South Islands, however most populations are now reduced to small discontinuous patches and this decline is continuing.

An example of this decline is found on Kopututea where there are no remnant species of Pingao to be found, due probably, to the presence of other more dominant species such as spinifex (Spinifex Sericeus).

- *Before development begins at any area, all plant pests as identified on the plant pest inventory should be eradicated.*
- *Planting areas should be spot-sprayed before planting.*
- *Provision should be made for the protection from animal pests.*

No fertiliser is to be incorporated in the soil at planting time but a dressing of urea may be necessary in year 1.

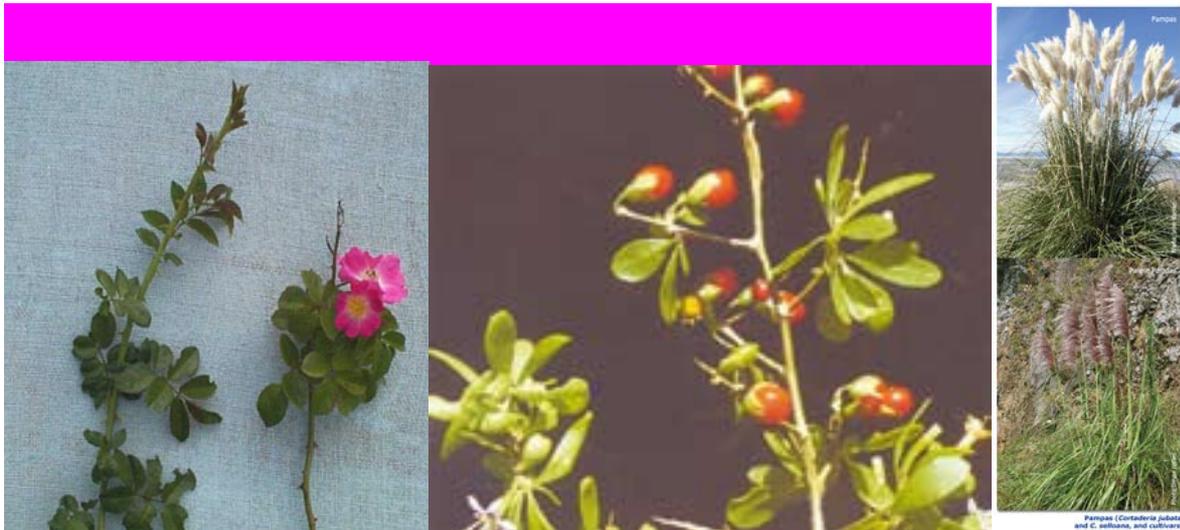
4.2.2 Plant and Animal Pests Policies

- a. There are a number of plant pests along the length of Kopututea which should be removed using a phased approach, as resources allow.**
- b. To protect dune vegetation by removing hare and other pests from Kopututea, using a phased approach, as resources allow.**

Discussion

Once plant and animal pests are under control there will be much greater opportunity to improve the dune environment at Kopututea. Hare, in particular, have a considerable impact on new native grasses, and can clear dunes of vegetation very quickly.

Unmanaged plant pests can also create considerable damage to the integrity of the dune environment. There are a number of plant pests at Kopututea, including a serious infestation of pampas and holly leaved senecio (see photos below). There is also a minor infestation of box thorn and sweet briar. Removal of these plant pests will require on-going maintenance using a combination of spray and removal by hand in some cases. Other invasive plants along Kopututea include bamboo, fennel and yuccas. These should also be removed, as resources allow. Removal of these plant pests will ensure the more desirable native plants have a better opportunity to survive and become established.



Sweet briar

Box thorn

Pampas



Holly leaved scenecio

4.2.3 Litter Management Policies

- a) To provide and maintain facilities for litter disposal at designated access and carparking areas.
- b) To encourage various agencies to work together to monitor and prosecute offenders who dump litter at Kopututea.
- c) To encourage environmental agencies and schools to undertake 'clean-up days' to remove rubbish from Kopututea.

Discussion

Litter and illegal dumping of rubbish is an ongoing problem at Kopututea. Currently bins are not provided at this site, however most litter has been dumped from vehicles or trailers. Council should consider extending its rubbish maintenance contract to include emptying bins along Kopututea. In 2008 Council undertook surveillance along the Centennial Marine Drive area for illegal dumping. The amount of rubbish in the area decreased, however this resumed again sometime after. Signage, fencing and surveillance were identified by Council's Environmental Health Unit as a means of reducing illegal dumping. It was also recommended that the NZ Police have a role with illegal dumping as Litter Control Officers and Bylaws Inspectors.

Environmental agencies and school have undertaken clean-up days along Kopututea in the past and have removed huge volumes of rubbish this way. These groups should be encouraged to continue undertaking these clean-up days while rubbish continues to be dumped at Kopututea.

4.3 Access Management Objective:

To provide sustainable pedestrian (and cycling) and vehicular access at designated sites, and close other non-designated accessways, using a phased approach. Access for sand extraction may continue subject to approval.

4.3.1 Access Policies

- a) **To provide pedestrian (and cycling) access along the length of Kopututea, and across Kopututea to provide pedestrian access to the coast. The proliferation of existing tracks should be reduced to support dune establishment and sustainable levels of use. Users will be encouraged to use designated tracks through signage and the appropriate location of car parks.**

Discussion

Appropriate recreation for Kopututea includes pedestrian access to the site where there is no regenerating or rehabilitation of dune areas being undertaken. Users need to be sensitive to the issues required to be addressed to protect Kopututea in perpetuity.

There is to be **no vehicular access** to the site except at the carparking areas. Access over the dune area to the coast is to be by foot access only, except where there has been provision made through designated vehicular accessways. Users will be encouraged to use approved tracks through identifying and enhancing appropriate tracks, and reduce use of non-approved tracks through signage, education and physical barriers (such as fencing/driftwood).

Pedestrian traffic has had a detrimental effect on the dunes and its fragile environment, and horses and vehicles have an even greater effect on the dune environment. The main impact is on the dune vegetation, firstly by direct bruising and breaking of the above ground parts, and secondly by physical damage to the underground plant parts by the forces of feet, hooves and wheels. The best way to provide for recreation and access over dune environments is to concentrate people through main access areas with the assistance of facilities e.g. walkways built to lessen the impact.

- b) **To provide vehicular access in to Kopututea from Centennial Marine Drive and across Kopututea to the coast at designated areas. The designated accessways should be clearly defined using signage. Other areas may be blocked using fencing or other methods to restrict access.**

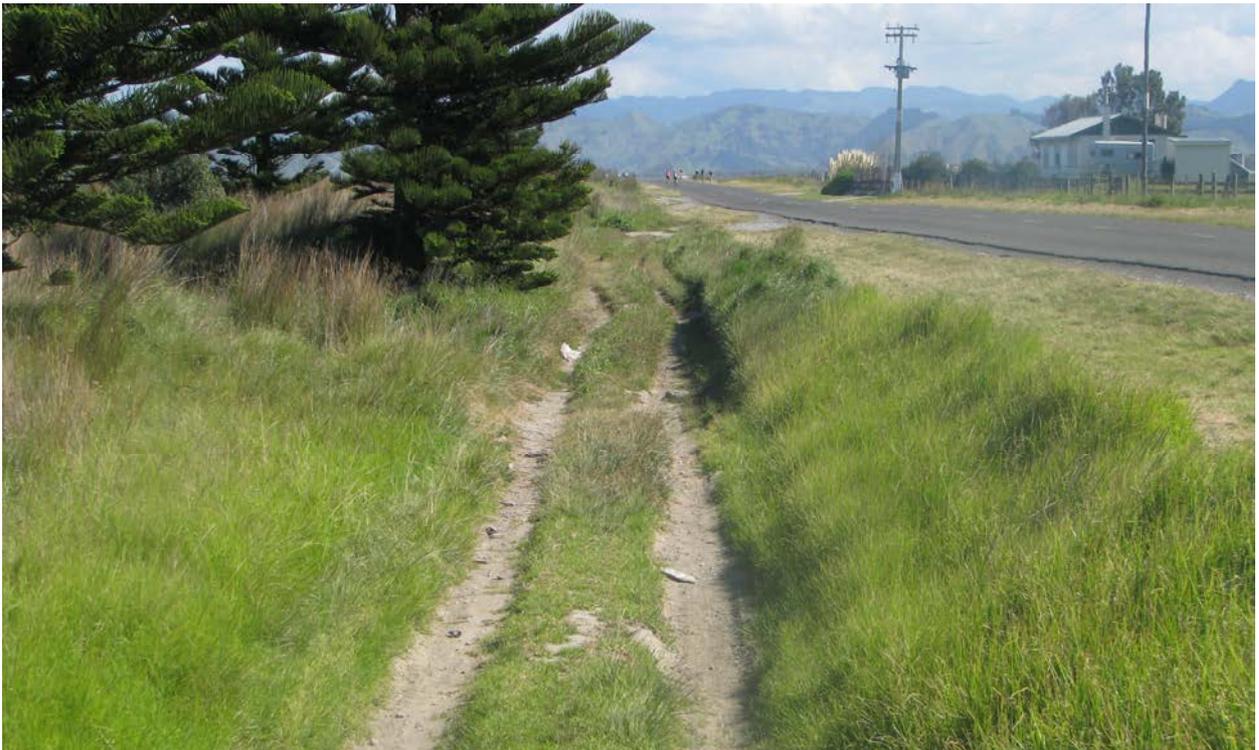
Discussion

Unlimited vehicle access has had a serious impact on the fragile dune environment, although access and recreation are important values, users will be encouraged to use designated vehicle access' sites and car parking areas. Access points should be located where they are convenient to users, leading to greater public acceptance and use. Fencing may also be used to control access to Kopututea and the coast.

The existence of many uncontrolled access points (more than 60) along this coastal stretch has encouraged the most severe degradation at Kopututea with many sand blow-outs occurring at access points and other denuded areas.

Car parking areas should be provided at main access points, and where possible, parking should be provided on raised areas. Currently people park their vehicles on the beach or on high points along the dunes where they are visible, for security purposes. To reduce driving on to the beach, fencing, signage, well designed, and frequent carparks should be provided.

Sand extraction currently occurs at two sites along Kopututea. The extraction access is subject to approval and resource consent conditions.



4.3.2 Fencing Policy:

Fencing may be used where necessary to manage accessways, remove animal pests, or protect new plantings.

Discussion

Education, signage, providing enough well-placed access points and car parking areas will not be enough by themselves to ensure everybody uses designated areas. There will still be those who wish to go "off road" and find their own 'secret spot'. In these cases the only way of ensuring appropriate use is to fence off areas. This can be costly but very efficient.

Driftwood is currently being used a cost-effective initiative to manage access. This can be effective, although the most determined users will manage to find a way around the driftwood if on foot or using four wheel drive vehicles. Levels of success should be monitored.

4.3.3 Driftwood Policy

To consider allowing Council to relocate driftwood from Midway/Waikanae Beaches to an area adjacent to Kopututea, at approved locations, consistent with resource consent conditions.

Discussion

The resource consent proposal is for Council to remove driftwood from the City beaches to approved areas on the seaward side of Kopututea. The driftwood includes flood and river borne material which must be wood material in its natural state. Other materials must not be shifted to this location. Conditions are discussed in the resource consent regarding volume, length of pieces and locations for storing and dumping of driftwood. Finer materials will be added on top of driftwood mounds to create sand dune like areas and with planting of sand binding grasses these areas will look natural in form and will provide a further buffer, protecting Kopututea from the forces of the sea. These areas may also be suitable, in time, for car parking, and providing viewing platforms.



4.3.4 Signage Policy

Use signage to inform about the values and qualities of the dune environment. Simple symbols and friendly language should be used to encourage appropriate use and respect for the area.

Discussion

Bay of Plenty Coast Care has found the most successful way of advocating for appropriate use of the dune environment is to provide enough, as well as well designed car park areas and accessways supported by signage that is friendly and informative.

Local schools could design their own messages supporting dune care. This is currently being trialled at WD Lysnar Reserve using artwork from local schools.