KAPITI COAST: CHOOSING FUTURES COASTAL STRATEGY

Our coastal system is more than the beachfront and dunes. It includes the coastal plain, extending to the foot of the hills.

Our approach is to treat the coast as an ecosystem to be managed as a whole, while retaining coastal lifestyle values and recognising the historical and cultural importance to mana whenua and the wider community.



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Kapiti Coast District Council in partnership with the community



Introduction From Mayor Alan Milne

Coastal erosion and accretion have been part of the Kapiti Coast since sea levels stabilised after glacial activity some 6500 years ago.

Now, as the world focuses its attention on global warming, climate change and the potential for small or large rises in sea

levels, is a very appropriate time for the Kapiti Coast to look at the overall issues of coastal management for the future of our coastal plain community.

Comparatively small rises in sea level and changes in climate with more intense storms and heavy rain incidents can have a major effect on the lower lying areas of our community and we must look at the future of our coast, its maintenance and development over a longer timeframe.

This strategy is not a detailed plan of action but a guiding document which aims to ensure that our community's vision to restore and enhance the wild and natural feel of the coast is achieved.

The coastal environment is under threat from development, from climate change and increased recreational use.

This strategy focuses on the coastal margins. It covers the area from Paekakariki in the south to north of Otaki. It aims to set out a framework for managed change over the next 20 years.

We cannot achieve our vision in isolation from the rest of the world but we can take local actions that support national and global objectives.

6 December 2006





Introduction and Overview

An introduction to the scope and intent of the Coastal Strategy for the Kapiti Coast.

The strategy builds on the *Kapiti Coast: Choosing Futures -Community Outcomes* and *Community Plan*.



Introduction and Overview

The Kapiti coastline stretches for approximately 40 kilometres from Paekakariki in the south to just beyond Ōtaki in the north. As well as being the location for significant areas of urban development, it is an important community asset with many unique characteristics and natural qualities. The Kapiti Coast has, historically, undergone long term accretion since sea levels stabilised after glacial activity around 6,500 years ago. This accretion has created the present coastal plain.

The extent of the coastal environment is generally the coastal plain, consisting of the dune systems and interdune hollows west of State Highway One. This includes rivers, streams and associated estuaries and lagoons which flow onto the coast. Kapiti Island is an icon for the coast and is included in principle in the strategy, however detailed management of the Island is covered by other legislation under the Department of Conservation.

The Coastal Strategy has been developed to guide management of the coastal environment over the next 20 years. The wider issues of the quality and nature of intervention along the coast have been considered against the wider community vision and outcomes for the whole coast. The Coastal Strategy will determine the management of coastal activities, access, recreation, harvesting, the natural and built environments, and coastal hazards.





What is the Coastal Strategy?

This strategy is not a detailed implementation plan, it is a high level guiding document. Its purpose is to guide management of the coast for the next 20 years, to ensure that the community's vision to restore and enhance the wild and natural feel of the coast is achieved.

The coastal environment is one of the key features of the Kapiti Coast, and is a major attractor for people to live and visit here. It is an area noted for its beauty, space and enjoyment, but it is also an area under pressure: with rapid development, climate change and increased recreational usage threatening to change the beach experience.

The main focus of this Coastal Strategy will be on the immediate coastal margins. The margins vary along the coast depending on the mix of public and private assets, landform, topography and landuse. This strategy acknowledges that the natural system at the coastal edge does not occur in isolation. It is significantly affected by development pressures, the weather and wave extremes, and the influence of the whole coastal plain, as streams and storm water systems discharge onto it.

This Coastal Strategy highlights a number of desired outcomes that seek to maintain the qualities of the beach experience in conjunction with the changing demands of the community. It sets a direction and encourages key stakeholders to see these outcomes achieved.

This strategy encompasses the entire Kapiti Coast from Paekakariki to north of Ōtaki. Some desired outcomes can be applied districtwide, but where necessary others are specific solutions to address local problems. The strategy clearly indicates what will be done districtwide in section five and specific local actions in section six of this document. Implementation plans will be developed following final completion of the Coastal Strategy.



Context

This section explains the context for the strategy:

- the natural systems and processes on the coast
- the effects of development on these systems
- the high value placed on the beach and coast by all who visit, use or see it from a distance.

The variety of community impressions and values are important when considering management actions.

What is the Coast?

natural ecosystems
development
community values



What is the Coast? natural ecosystems

The coastal plain is a sensitive environment consisting of the relationship between the sand or stones, vegetation, wave and wind actions. This environment is dynamic and can experience rapid changes in beach levels, dune formation and water quality. The beach and coastal plain has been highly modified by development and use since permanent settlement.

As part of development of the coastal plain for agriculture and urban areas, bush has been cleared, dunes flattened, exotic species planted and introduced, wetlands drained or filled, aggregate removed from rivers, river channels narrowed and protective structures built. All of these changes to the environment have affected coastal ecology and processes. This dynamic system would have been able to retreat and accrete over a wide area prior to permanent development, but is now constrained to a narrow strip in most areas.

The landforms and geological features visible from and associated with the coast form part of the alued natural character. The majority of the foredune is a single low profile dune. The southern areas of Raumati, Queen Elizabeth Park and Paekakariki have considerably higher foredunes. Some areas have specific landform reducing the visual impact development on the coast eg Otaki and Paraparaumu, where generally only the front row of houses have a view of the coast. In other areas landform allows more properties to have a coastal view such as in Raumati and Paekakariki. The valued character associated with these features can be degraded by inappropriate development.

There are two rivers and six streams reaching the coast, which have significant influences on the coast as they provide wildlife habitat, sediment (sand) and freshwater to the coast. Freshwater is necessary to support shellfish beds. There was a detailed survey of the flora and fauna on the coast conducted in February and March 2005. The survey showed large numbers of exotic weed and pest species present, as well as some areas of largely native vegetation including some rare and threatened species.

There are a number of potential threats to the natural systems causing concern including the rapid rate of coastal development, effects of climate change including more frequent storm events, sea level rise, salt water inundation of wetland areas and pressure from increased recreation use.









There are three distinct substrate types present on the coastal plain. Most of the coast is based on sand with an area south of the Ōtaki River (Te Horo) predominately stone and boulders and a rocky coast south of Paekakariki. Large expanses of peat wetland have formed in back dune hollows.

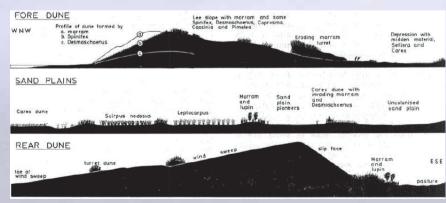
The shellfish on the coast are numerous and include pipi and tohemanga. The shellfish beds, which rely heavily on clean water to grow and be safe to eat, have depleted over the years as freshwater systems have become polluted and beach use has increased. Shellfish can be damaged by vehicles and horses crossing the beds. There are other small animals including, insects, sand hoppers and crabs, living in the intertidal zone of the beach.

There is generally a low profile well vegetated Spinifex foredune in the northern part of the district especially in rural areas. North of \bar{O} taki and between Te Horo and Waikanae there are expanses of largely undisturbed Spinifex foredunes with a Marram back dune with some shrubland present. Te Horo has extensive wetland areas in the back dune hollows. These are well vegetated with native species in many places.

The back dune shrublands and wetlands are important habitats for native wildlife and there is very little remaining native back dune vegetation in the District. Some native shrubs still present along the coast include Taupata, Muelenbeckia, Toe Toe, Ngaio, Coastal Tree Daisy (Olearia solandri) and Flax (harakeke and wharariki) and small populations of Sand Daphne. There are recent restoration projects, undertaken by community groups in association with Greater Wellington Regional Council, where these plants have been reintroduced. For more detail on native coastal species see the Kapiti Coast Native Planting Guide.

In southern more developed areas (Waikanae and Paraparaumu) there are steep and often eroding Marram dunes where the dune vegetation has been replaced with escaped garden plants, invasive Marram grass and other weeds. Raumati South and Paekakariki, with the notable exception of Queen Elizabeth Park, has no native dune vegetation present within the coastal margin due to seawalls and other protection structures created after 1976 on reclaimed land.





Dune profiles relative to foredune vegetation. E A Esler Extract from Proceedings of the Ecological Society 1970.

development

The Kapiti Coast is a growing community with a steady rate of development particularly in residential development. The District has been described as a string of pearls, with its discrete settlements along the coast, separated by the rivers and streams which define them.

The physical characteristics of the coast vary greatly from seemingly untouched beaches with pristine dunelands to engineered seawalls with visible residences, lawns and gardens, from expanses of sand to waves crashing on rocks. The built character can define the beach experience for those on the beach and the appearance of the public private edge can create privacy concerns for beach front residents.

The built character is not highly prominent in the northern rural areas where much of the coast has few buildings or structure visible from dry sand areas. However this makes the few visible buildings seem to stand out and have a bigger impact on the

coast both as landmarks and breaks in the natural contour and character.

Southern areas are more highly modified with seawalls, rock revetments and erosion scarps are more common. Development is more visible from the beach in southern parts of the coast, in particular Raumati and Paekakariki.

The definition of property boundaries is unclear in many places, where either the public walk across private land or more commonly, public land is used by beachfront properties in making it appear private.

There is a strong connection to Kapiti Island both visually and from a historic and cultural context. Views from the beach can be extensive, stretching from Kapiti Island to the Tararua Ranges and the Kaikoura Range in the South Island. Mt Ruapehu and Mt Taranaki are also visible at times, giving a sense of connection to our neighbours.







community perspective

The coast is important to many different people and affects its visitors in different ways. It can be an extremely personal experience. A trip to the beach is always memorable. It is a food basket for many (if you can find or hook something) while for others it is a haven to refresh the spirit, renew the soul and escape the intensity of urban life. The beach can also be invigorating, dynamic and exciting, as it is always changing with the chance of finding something new on the unspoilt shores. The contrasting ability of the environment to be extremely wild while at times very tranquil is part of the attraction to the beach.

The beach is a key part of the Kapiti Coast lifestyle. The location of the towns and villages in the District adjacent to the coast, emphasises the importance of a beach experience to the community. In order to manage the coast in a way that maintains and enhances the lifestyle values, we must first establish them.

The coastal experience can be walking on the beach, looking at wildlife, sunsets over Kapiti Island, looking back to the mountains and feeling a sense of enclosure. The coast is a great place because you can relax and enjoy it in your own way. The coast can be a source of self, a reminder of where you come from or a reminder of the need to protect our valued environments for future generations. For most of us, the coast and views of Kapiti Island mean home and the natural playground for our families.

The value of the coast to local iwi as a significant resource for traditional activities and spirituality also needs to be recognised. There are many practices still followed today. There is ongoing discussion with local iwi as part of the Coastal Strategy development.

The natural environment including coastal areas, waterways and oceans and how Māori interact with them is crucial to their identity. The ongoing ability to keep tikanga and mahinga kai practices alive is crucial to the wellbeing of Māori. Tāngata whenua express that they are interconnected with the whenua and do not separate spiritual aspects from physical practices. Not so long ago kaimoana was the staple diet for most Māori whanau and living off the land was an absolute right and necessity. Māori have developed customs to look after the mauri (life force) of all natural resources to ensure that the relationship between people and the environment is characterised by respect and reciprocity and to ensure their sustainable management.

Māori regard the coastal environment as kete kaimoana (baskets of food). As a food source, the coast needs to be treated with respect. The philosophies are simple, for example, Māori want clean water because they eat the kaimoana that comes from it. Healthy air because that's what we all breathe. Fresh waterways



so birdlife, fish and plants can flourish. Kaitiakitanga means ensuring our children have all that is valued by exercising care and guardianship over the coast.

The survival of individuals and communities is dependant on healthy air, land and water. It is essential for us to think ahead for future generations and manage our natural resources well today.

Through the consultation, it has been established that the values vary seasonally and by location. For example, there is general acceptance of dogs and horses having more freedom during winter months and early mornings when less family activities occur on the beach. Activities which are acceptable in Peka Peka or Te Horo, such as riding horses may be unacceptable at Paraparaumu Beach during peak summer season.

The Kapiti Coast has been described as Wellington's playground, with population on our beaches swelling during summer especially at weekends.

The beach is a very popular recreation destination for residents and visitors, valued as a great place to walk dogs and ride horses, for family picnics, safe for children to play, with good surfing, whitebaiting, fishing and swimming opportunities. This can lead to increased conflicts between users. The coast is also valued as a source of inspiration for the creative community.

The economic value of the coast is clear in terms of tourism, coastal property values and recreation opportunities. It is also important to recognise the economic value that visitors to the beach bring to coastal towns and villages as their holiday destination. Preservation of the current sandy beach at Paraparaumu and Ōtaki is worth considering in these terms.

There is undeniable appeal in the unpredictability of our coastal environment, with its many opportunities and benefits for coastal living and tourism (Kapiti Island trips, fishing, diving, accommodation, cafés, restaurants, kayaking and boating).





Vision

This section deals with the vision developed through the consultation.

The vision has been developed in a series of layers from broad outcomes identified in the *Community Plan* to detailed outcomes of coastal management.

Consultation

- tāngata whenua vision
- wider community vision

 Community Outcomes-Choosing Futures

 Coastal Strategy Vision

 Coastal Management Approach
- districtwide coastal outcomes



Consultation

How did the consultation shape the strategy?

Consultation began in April 2005 with a workshop to develop management principles. Further public workshops, meetings, coastal walkshops and hikoi, and informal consultation with stakeholder groups, identified issues and management options and helped define local management strategies. The next stage for the Draft Strategy was to invite formal public submissions. The diagram below indicates how the consultation drove the strategy development.



Work on coastal hazard assessment is continuing and a key output will be a review of the coastal building setback lines in the District Plan. (Changes to the building lines are not included in this strategy. This will be a separate, publicly notified District Plan change process in 2008.)



tāngata whenua vision

Tāngata whenua of the district are Ati Awa ki Whakarongotai, Ngati Raukawa ki te Tonga and Ngati Toa Rangatira including their whanau and hapū. In the 1820-1830s they were firmly established in the District and were signatories to the Treaty of Waitangi at Kapiti Island, Waikanae, Ōtaki, and Motungarara Island. These three iwi, their hapū and whanau, are closely bound together by whakapapa, history and formal allegiances and continue to give effect to their Kaitiaki / Kaitiakitanga role.

Kaitiaki / Kaitiakitanga

Kaitiakitanga is the tikanga and practices which have as their primary objective the sustaining of the Mauri (life force) of natural and physical resources (including humans). Members of the present generation have the responsibility, passed to them by preceding generations, to care for the natural environment and an obligation to ensure that a viable livelihood is passed on.

Kaitiaki / Kaitiakitanga is inextricably linked to tino rangatiratanga, as it may only be practised by those whanau, hapu or iwi who possess tino rangatira in their iwi area.

Principles

Tangata whenua base their vision for the District on four main principles:

Whakawhanaungatanga / Manaakitanga

This relates to caring for family, guests and people within the community. The core from which this manaakitanga comes is the marae, the principal home which ties tāngata whenua to their areas, through the physical embodiment of their ancestors. It is important that the marae remains well maintained and thoroughly respected. The wellbeing and health of the marae determines the emotional spiritual and physical wellbeing of the people.

Te Reo

It is the language through which tikanga is conveyed and an official language of New Zealand. It is fundamental that the language, as a deeply treasured taonga left by ancestors, is nurtured throughout the community and continues to prosper.

Kotahitanga

Through unity, communities have strength. Working together with tāngata whenua and the wider community, we can ensure our District's heritage, cultural development, health and education flourish.

Tino Rangatiratanga

The continuation of self-determination and self-governance of all tribal matters.

Examples of what these principles can mean for tangata whenua on the coast

Whakawhanaungatanga / Manaakitanga

- ability to provide the marae with food;
- ability to look after and feed guests;
- ability to harvest fish, weaving materials, hangi stones and firewood;
- access.

Te Reo

• traditional Māori names for the coast and its resources understood, recorded and respected.

Kotahitanga

• finding ways for tangata whenua and community to work together on coastal management.

Tino Rangatiratanga

• ensuring that tāngata whenua can undertake the practice of kaitiaki / kaitiakitanga.

Practical examples of what this can mean for the coast.

- healthy waterways and seas;
- healthy dunes and wetlands;
- ability for tāngata whenua to manage harvest areas and customary fisheries.

• coastal signs provide for traditional names and explainations.

- respect for traditional systems for management of resource use eg rahui;
- support rahui with statutory systems eg bylaws;
- use customary lore as well as law, to protect the coast;
- set up joint management structures for the coast with tāngata whenua, the Council and community.
- ability to apply rahui and other harvest restrictions;
- management of customary harvest areas;
- development of iwi management plans.

kaitiakitanga

the wider community vision

The Kapiti Coast:Choosing Futures - Community Outcomes

The Kapiti Coast: Choosing Futures - Community Outcomes make it clear the community want a comprehensive, integrated approach to coastal management (not just protection), which treats the coast as an ecosystem to be managed as a whole. The coast is considered as a natural system for people to enjoy, a resource to be used wisely, a place that works for young people and as a focus for local character.

Outcome 1: there are healthy natural systems which people can enjoy

The coast in its entirety is recognised:

- as a complex system that is affected by actions along its length;
- as being central to the local culture and lifestyle;
- as a place for its natural and wild feel;
- as being the marine edge, the front dunes and wetlands. and that this is supported by:
- retaining the wild natural character and the health of the coastal ecosystem as a first priority in any decision;
- retaining dunelands and wetlands in subdivision design and development;
- achieving improved design of coastal walls with a focus on 'natural design';
- avoiding any further new greenfields subdivision on the front dunes and associated wetlands.





Coastal Strategy Vision

The vision for the Coastal Strategy was developed as a set of principles at the initial Coastal Management Strategy Workshop in April 2005. The Council adopted the principles as a guiding direction for the development of the Coastal Strategy.

overarching objective

That environmental and lifestyle values that have always attracted people to the area are retained and enhanced and the historical, geological and cultural values are maintained.

context principles

The coast is recognised as a natural system that accretes and retreats as part of the geological cycle and processes.

The coast strip sits within a coastal plain back to the base of the hills. There is a need to think about the coast as a dynamic system.

In developing a Coastal Strategy the existing legislation regarding coastal resources includes that the Foreshore and Seabed Act, Resource Management Act and NZ Coastal Policy Statement, Fisheries Act, and Conservation Act be acknowledged as a guiding framework.





Coastal Management Approach

The Coastal Strategy brings together the practical actions to achieve the tāngata whenua and community vision for the coast.

This section details the outcomes and principles which guide the

strategy and set the framework for the actions.

Community Outcomes

Outcome 1: there are healthy natural systems which people can enjoy

Outcome 2: local character is retained within a cohesive District

Outcome 4: the District's resources are used wisely

Outcome 6: the District is a place that works for young people

Outcome 7: the District has a strong healthy and involved community

Describe the community's approach to coastal management

Tāngata Whenua Vision for the Coast

Kaitiaki / Kaitiakitanga

Healthy waterways

Tāngata whenua role in district development

Strong and effective three-way partnerships

Iwi management plans

Connection to land respected and understood

Customary lore and law appreciation

Coastal Management Strategy

Sets the direct for coastal management for the next 20 years

Vision

Overall statement about what the strategy seeks to achieve

Context Principles

Define the physical and statutory environment of the strategy

Districtwide Outcomes

State what the strategy seeks to achieve for the specific issues

Management Principles

Describe how the coast will be managaged to achieve the vision

districtwide coastal outcomes - the desired results of implementing the Coastal Strategy

- Public dune margins are no longer gardened with exotic species by adjacent owners.
- Public land is clearly identifiable and as natural as possible with **native plants**.
- The community is well **informed** about dune restoration and enhancement.
- There is **interpretive signage** at public beach access points explaining the fragility of coastal ecology.
- The control and eventual elimination of **pest plants and animals** (including wild cats, ferrets and rabbits).
- **Restoration planting** has been a priority on the foredune and has formed a natural erosion buffer.
- Key interest groups are kept informed and involved in beach management activities.
- All access to the beach across the foredunes is via a public accessway as these are suitable for all users and protect the environment.
- Outstanding natural areas and fragile communities are identified and protected by limiting access or having no access.
- Harvesting of materials from the beach is managed to protect habitats, areas of cultural significance and prevent erosion.
- Any structure within the coastal reserve (protection and access structures) are part of the built character and must be well designed and multipurpose where possible.

- An enforcement presence is needed to enforce bylaws.
 Alternatives for enforcement should also be considered.
- The **Beach Bylaw** is reviewed to become a robust management tool with well enforced actions.
- The **designated activity** zones in the Beach Bylaw are effective in minimising user conflict.
- All **user groups** feel involved in developing management changes for the coast.
- The individual **character** of settlements is clear with the beach providing a linking element between them.
- Amenities, such as toilets, parking areas and boat facilities are clustered to protect natural and sensitive areas from damage.
- The Beach is safe and welcoming for all to use and has the flexibility to accommodate existing and new sports and activities.
- All users will need to work together to achieve a harmonious beach experience.
- Improved understanding that the Coast is a single, contiguous natural resource. And that the coastal margins in front of public and private assets should be managed in a holistic way.
- The beach is a key part of the Kapiti Coast public realm.
 It will be visible and accessible from coastal roads and reserves.



Management Vision

This section deals with the core principles of coastal management for the Kapiti Coast, developed at the first workshops and confirmed and refined throughout the consultation process, and the legislative framework for coastal management.

- management principles
- legislative context



management principles

- Long term solutions which protect coastal processes and systems are sought for the benefit of current and future generations.
- Unique **heritage** sites on the coast are protected.
- Unique areas and interests along the coast are recognised and solutions are sought which **protect character** and the **environment**. This means management practices reflect that different parts of the coast have **different needs**.
- That interventions on the coast should enhance the potential of **natural features** to be self sustaining and blend with or integrate with natural systems.
- Private and public access is balanced within the constraints of coastal systems. Need to seek solutions which achieve compromises to protect the coastal environment. "Everyone needs to give a little bit."
- Ensure that every stakeholder is involved in the process of developing the Coastal Strategy by having an **inclusive process** of consultation; communication and education on coastal matters which incorporates everyone, not only those living at the coastal edge now.
- **Emergency management** strategies and related processes are planned in advance of possible events.
- The coastal reserve and dune margins are treated and understood as an integrated natural system and managed as a community asset.
- The Kapiti Coast is a string of distinct built settlements
 with unique character linked together but separated by areas
 of open space.







What does it all mean?

This means the sustainable lifestyle values of current residents need to be maintained and enhanced. A large number of people live here to enjoy the coast for recreation, food gathering, views, openness and spiritual reasons. These valued aspects of the coast need to be managed to ensure all that happens now on our coast can continue to be enjoyed by future generations.

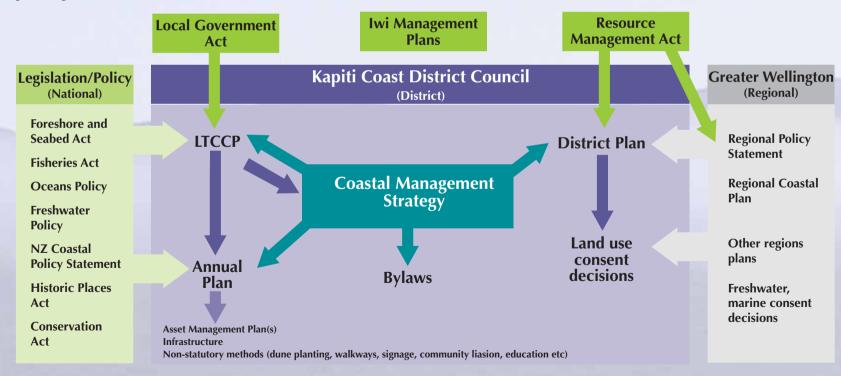
legislative context

The Coastal Strategy is a non-statutory document and provides direction for a range of council and community functions, including activities under the Resource Management Act 1991, the Local Government Act 2002 and Iwi Management Plans. The Coastal Strategy provides the policy basis and direction for future coastal management.

As a strategic document, the Coastal Strategy provides guidance to many of the Council's functions and other management documents, such as the District Plan, Long Term Council Community Plan, bylaws, Asset Management Plans and financial planning.

It is also important to recognise the influence of national and regional strategic and policy documents, in particular the New Zealand Coastal Policy Statement, the Greater Wellington Regional Policy Statement and the Regional Coastal Plan.

The main regulatory tools for the Council in implementing the strategy are the District Plan, Beach Bylaw 2002 and other bylaws. These control activities occurring on the beach including harvesting (excluding food), development and access to the beach.





Challenges and Overall Responses

Seven main themes were identified through the consultation. These will be managed districtwide to achieve the Coastal Strategy's vision. Implementation plans will be developed to show how and when the responses will be put in place at a district and local level.

- community stewardship
- natural environment
- harvesting
- getting to the coast
- activities on the coast
- hazards
- built character















Challenges

There are seven main challenges for coastal management on the Kapiti Coast. In broad terms these are, the **stewardship** structures to involve the community and tāngata whenua in making management decisions; the health of the **natural ecosystems** on the coast, **harvesting** of resources on the coast, **access** to the coast, **recreation and use** of the coast, erosion and other **coastal hazards** and the scale, location and **built character** of coastal development.

The quality of indigenous ecosystems on the coast and retention of the wild natural feel of the coastal margin is at risk due to human actions on the coast. There have been significant changes in the quality of freshwater systems and the availability of shellfish. The degradation of natural ecosystems and their ability to provide a food resource is a major concern for tangata whenua. This strategy will set a framework for the management of resources to ensure that they are available without compromising the cultural and natural values of the coast.

Local communities have expressed concerns regarding the scale and nature of development along the coast. There is a high demand for coastal properties resulting in increased residential and lifestyle block development along the coast. Should future development be closer to or further from the coast, or is the current setback appropriate for beach amenity? How important are views from the beach? What are the essential elements of the beach environment to retain the lifestyle values on the coast? (eg dry sand, water quality for swimming and food production, good access for all) how much harvesting should be permitted (excluding food as this is covered by other legislation) as opposed to the current rule of "none" in the Kapiti Coast Beach Bylaw 2002? How can the unique character of existing settlements be recognised and protected? There are also concerns in existing urban areas about the potential effects of coastal erosion on public infrastructure and private property.





community stewardship

Community discussion revealed considerable frustration over the overall management of the

coastal area. There are many overlapping agency responsibilities and a lack of clarity about how people can be involved in looking after the coast. There are the individual community groups generally involved in planting and restoration, but there is no mechanism via which people can work on the bigger picture.

There are also frustrations for tangata whenua. Specific legislation gives them the power to regulate members of their own iwi and hapu in terms of harvest from customary food gathering areas. Some iwi members are also Fisheries officers under the Fisheries Act and help police the level of catch and shellfish harvest from the coast generally. However, there is a lack of community understanding of the kaitiaki role and the potential to use rahui and customary harvesting roles to help look after the health of the coast.

Tāngata whenua and the community generally have similar concerns about the coastal health and wellbeing. There are opportunities for the specific kaitiakitanga responsibilities of tāngata whenua and concerns about the mauri of the coast to be provided for, while also providing for more recognition of the wider community stewardship role. Tāngata whenua have expressed an interest in providing a monitoring and compliance role on the coast. Beachfront owners and regular users have also been a regular source of information on beach activities.

There is also frustration about actions of other communities especially those to the north of the District having effects on the Kapiti Coast and a desire to have a more integrated approach to managing the wider coastal issues in conjunction with other Regional and district authorities.



Challenges

The coast is one overall system that extends from Taranaki to the south. This is most obvious at times of flooding in the Manawatu, when trees and silt are flushed along the coast.

At the same time, there are obvious physical 'sub-systems' within this wider picture. The most obvious are the estuaries but there are also, for example, the sand beaches and dunes and the shingle beaches. Other 'sub-systems' are the areas modified by urban development.

There are the broad rohe (areas) of Āti Awa ki Whakarongotai Ngāti Raukawa ki te Tonga and Ngāti Toa Rangatira and specific kaitiaki responsibilities of hapu within those areas. For example Ngāti Haumia, a hapū of Ngāti Toa, has responsibilities and authority in the Paekakariki area.

There are distinct urban and rural communities along the coast, all with very active community restoration groups.

What structures can be used to ensure:

- the wellbeing of the whole coast is monitored and managed?
- the role of tāngata whenua as kaitiaki is understood and respected by the wider community and able to be implemented?
- the specific issues of the 'sub-areas' are monitored and managed by the community, tāngata whenua and agencies.





Response: Community Stewardship structures

Council and Tāngata Whenua Overview **Annual Coastal Forum Local Stewardship Groups**

Via Te Whakaminenga o Kapiti;

- Coastal Management Forum provides an overview report;
- Greater Wellington invited to have two elected members present to receive report;
- formal report to Council and tangata whenua on issues and actions;
- receive central government advice about policy proposals
- feed back to community groups, to Forum and to local groups.

Annual Forum - open to all interested

- meets once a year to look at general matters against strategy;
- may meet at other times to discuss issues arising;
- focus on whole coast and major processes;
- undertakes a coastal walkshop/hikoi down the coast;
- receives concerns and reports from community groups and iwi for each management area;
- Department of Conservation, Greater Wellington and other agencies invited;
- prepares a simple 'State of the Coast' report for Council and tāngata whenua.

Local Stewardship - open to all

- meet twice a year (or more if wanted);
- monitoring via walkshops;
- input into local implementation plans;
- day to day matters conveyed to Council/Greater Wellington as required for action;
- prepares a simple report on issues to Community Boards and Annual Coastal Forum.

Facilitated by Council

Response: Proposed Management Areas

The two guiding strategic documents for coastal management will be the Coastal Management Strategy and any iwi management plan developed by any of the three iwi.

Other than the Ōtaki River Iwi Management Plan developed by Ngā Hapū o Ōtaki (Ngāti Raukawa) there are no other plans developed yet. The Ōtaki River Iwi Management Plan has relevance for the management of the Ōtaki River mouth and estuary. Tāngata whenua have been significantly involved in the development of this coastal strategy. The strategy acknowledges their concerns and the particular role of kaitiakitanga in relation to protecting the mauri. There is great similarity in the practical on-the-ground concerns of tāngata whenua and the wider community. Any future iwi management plan and the Coastal Strategy will complement each other.

In order to acknowledge iwi jurisdictions and the likely coverage of any iwi management plans in the future, while acknowledging the specific areas and settlements, the following management areas have been aligned with the rohe of each iwi.

These management areas form the basis of the local area plans that follow at the end of the strategy. They are shown on the map opposite.



Response: Management Tools

There are a number of management tools that can be used to manage the way the coast is used, protected and restored. They range from the traditional resource use management tools of tāngata whenua, regulatory tools under various pieces of legislation, to active involvement of the community. The main tools used in the remainder of this strategy are outlined below, with an indication of where they will be most relevant to the remaining six challenge areas.

The provision of on site enforcement of rules is vital. Iwi and council compliance officers will need to work with the police to deal with infringements.

The District Plan provides the ability to regulate buildings and land-uses on the coastal area, while bylaws can manage access and use of the beach area.

Management of Resource Use and Effects on Ecosystems

Management Tool	Access	Harvesting	Recreation/Use	Natural Systems	Hazards	Built Character
Use and access calendar/maramataka	V	V	V			
Rahui	✓	~	✓	V		
Rotational Harvest		~		V		
Marine Reserves	✓	~	✓	✓		
District Plan	✓			✓	V	✓
Bylaws	✓	~	✓			
Protocols/Tikanga/Kawa		~		✓		
Beach Patrols	✓	~	✓	✓		
Polices assisted 'blitzes'	V		V			
Regional Policy statement and Regional Plan	V	V	V	V	V	

These tools are a mixture of traditional Māori systems for managing resource use in areas under stress and more recent tools developed under new legislation. The use and access calendar (maramataka) is the idea that we need to let people know when it is alright to use an area and when it is not. This might relate to times when birds are nesting for example, or it may be that access is generally restricted except at whitebaiting time.

Rahui is the placement of restrictions to aid ecosystem regeneration. It is designed to prohibit exploitation of a resource. A mauri stone was traditionally placed in the affected area, accompanied by appropriate ritual and prayer. While rahui have always been placed by iwi, it is only in recent years that they have been supported by restrictions under the Fisheries Act. There is opportunity to use both.



Education

Management Tool	Access	Harvesting	Recreation/Use	Natural Systems	Hazards	Built Character
Signage	V	✓	V	✓	V	
Newsletters and 'Coastlines"	~	~	~	V	~	V
Coastal Walkshops and hikoi	V	V		V	~	

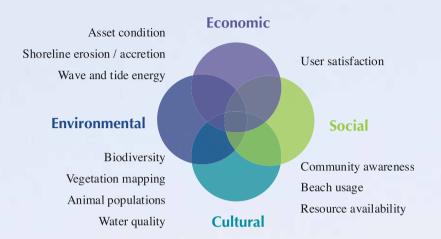
Ecosystem Restoration

A very significant part of the community vision is restoration of damaged ecosystems. A huge community effort is underway in this area. There is also opportunity to plant on the coast to support future harvesting, such as for weaving. Traditional engineering solutions to protect assets such as roads, are also changing and beach re-nourishment with planting are being used, where possible. Beach drainage is a more experimental solution which is being explored by the Council.

Management Tool	Access	Harvesting	Recreation/Use	Natural Systems	Hazards	Built Character
Assist Beach Care groups				V	~	
Council planning projects				V	V	
Provide plants to residents				✓	✓	
Encourage/coordinate new groups				V	V	
Dune reshaping and planting				V	~	
Beach renourishment with land based sand				V	~	
Beach drainage				V	V	

Asset Management

The way in which major community assets are protected (eg roads) can have a major impact on the coast. Decisions about the kind of access to the beach, its location and design, is also hugely important in terms of who can enjoy the area and impacts on the coastal environment. These are discussed in detail in the next sections.



Management Tool	Access	Harvesting	Recreation/Use	Natural Systems	Hazards	Built Character
Protection structures					V	✓
Access paths and structures	✓	V	V	V	V	V







Monitoring

An ongoing monitoring and evaluation programme is the basis of adapting management actions and planning to ensure environmental and lifestyle values are maintained and enhanced. The success of the strategy in achieving the vision and outcomes will be monitored in a number of ways to ensure all four well-beings are met. A range of indicators are already monitored by both the Kapiti Coast District Council and by Greater Wellington. New monitoring will be established for coastal hazard management, resource availability, beach usage, and user satisfaction. Monitoring timeframes may vary from several times a year to once every five years.

Indicator		Measured by	Reviewed By
Shoreline erosion/ accretion	Movement in the coastline over time	KCDC	-
Wave & tide energy	Strength of the sea and potential effects on assets (sea walls, steps etc) and shoreline	KCDC	-
Biodiversity	Health of natural systems	KCDC	Coastal Forum tāngata whenua
Vegetation mapping	Variety of plants, including weeds, in a given area	GW, KCDC	Coastal Forum tāngata whenua
Animal populations	Numbers of vertebrates and invertebrates on the coast	GW, KCDC	Coastal Forum tāngata whenua
Water quality	Pollutants in freshwater and bathing water	GW, KCDC	Coastal Forum tāngata whenua
Resource availability	Sufficiently abundant resources to allow harvesting	Iwi Coastal Forum	Coastal Forum tāngata whenua
Beach usage	Range of activities occurring on the beach	KCDC	Coastal Forum
Community awareness	Knowledge of coastal issues and management	KCDC	Coastal Forum
User satisfaction	Satisfaction with Council facilities and management	KCDC	Coastal Forum



natural environment

The coast comprises a wide variety of different habitats including wet sand, intertidal, mobile

foredunes, more stable backdunes, shrublands, river and stream mouths, estuaries, lagoons, wetlands and very small remnants of coastal forest. Some of these environments are very sensitive to pollution and damage from introduced pests. The natural environment on the Kapiti Coast is significantly altered from its pre-settlement state. In some areas few natural coastal features remain.

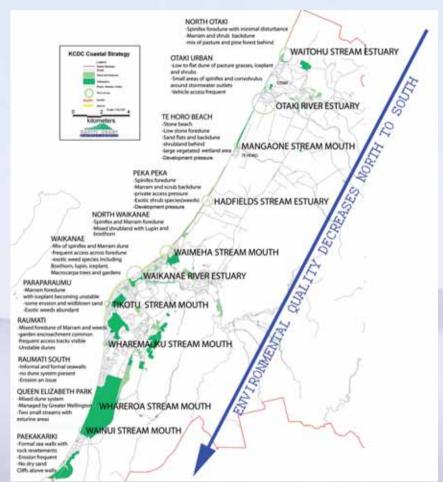
Pockets of significant open space remain distributed along the coastline. Vegetation in these is mostly scrubland with a mixture of low indigenous and exotic grasses, weeds and shrubs. These areas are an important habitat for native skinks. Many of these open spaces including river and stream mouths and parks define the edges of distinct settlements.

The shellfish and other invertebrates living on the coast are numerous and include pipi, tohemanga, insects and crabs. Most of these live on the beach in the intertidal zone.

Birds are often present on the beach including some seasonal nesting around estuaries and in dry sand areas. Visiting birds include penguins, spoonbills, terns and oystercatchers as well as the more common seagulls.

The map opposite shows the different character and threats to the natural environment along the coast as well as the general trend for less natural coastal environment in more highly urban southern parts of the District. Queen Elizabeth Park is an obvious exception to this trend.

The overall strategic response is to keep people out of the dunes, manage pests and restore natural systems.



Challenges

Sand dunes contain many important **cultural sites** including middens - New Zealand's early domestic rubbish dumps, remains of general living areas with stained sands from ovens and urupa (burial grounds). These sites are very **significant** spiritually to Māori. They also provide a tangible reminder of our history and help us better understand the past.

There is clearly a need to continue to **manage vegetation** on the coast. This involves a combination of weed management and **restoration planting**. In order to manage the coast more comprehensively there needs to be plants available to undertake restoration plantings along the coast.

In recent years Spinifex and Pingao have been available for restoration plantings but **back dune species** are also desired. Spinifex and Pingao produce a lower profile more stable dune which quickly recovers much more from storms than exotic Marram grass.

Pest animals such as rabbits may also need to be controlled as these are significant predators of native sand binding plants (Spinifex and Pingao). Cats are a major predator of native skinks and birds. People need to understand the devastating effect cats can have on native wildlife.

There is a community desire to control all weeds and in time **eradicate** them. **Weed control** on public coastal reserves is often undertaken as a joint project with Greater Wellington Regional Council, Kapiti Coast District Council and the community.

The large numbers of exotic plants present is a concern as most of these species are considered weeds. These include; Gorse, Blackberry, Lupin, Buddleja, Pampas, Brush Wattle, Broom, Pines, Boxthorn, African Feathergrass, Cape Honeysuckle, Cape Ivy, Iceplant, Evergreen Buckthorn, Helichrysum, Macrocarpa, Agapanthus, Buffalo Grass, Artimesia, Banksia, Century Plant, Kikuyu, Geranium, Tradescantia, Watsonia, Boneseed, Yucca, Onion Weed, Bamboo and other garden escapees.

Response

There will be more extensive **public education** on cultural issues including leaving any potential **cultural artefacts** or any koiwi (human remains) where they are. If you discover any contact the Police.

A review of archaeological and **cultural sites** (waahi tapu) will be undertaken as part of the District Plan review.

The Council will work with existing **community groups** and support and encourage new groups and individuals to undertake foredune restoration projects planting Spinifex and Pingao. Consider extending into back dune areas (as started at the most recent Manly Street project).

The Council will **supply** appropriate trees/plants/shrubs to established community groups and groups of coastal neighbours for planting on public accessways and banks when surplus plants are available.

Pest control will continue to be undertaken as per the **Wellington Region Pest Control Strategy** and specific projects with community groups may go further where the group is willing to be involved in management. Cats can potentially be controlled as part of subdivision conditions in new developments.

Education will be undertaken on undesirable exotic plants on the coast, weed and pest management including appropriate alternative plants and garden dumping issues.

Weed control as per **Greater Wellington Pest Control Strategy**. For example 'Boneseed' will be managed on the coast north of the Waikanae River up to State Highway One and in other areas control is encouraged but voluntary, and specific projects with community groups may go further.

The native foredune species are easily **out competed** by exotic species like Buffalo Grass or Iceplant, which do not create such an effective storm buffer. Where practical these will be removed as part of restoration projects.

Challenges	Response
Pollution in rivers, streams and lakes is a huge problem throughout the world. There are a number of landbased activities which contribute to this. Agricultural runoff, earthworks, litter, quarrying, removal of	Work closely in partnership with Department of Conservation and Greater Wellington Regional Council to manage the coastal environment eg. Waimanu Lagoon flushing.
vegetation and industrial discharges all contribute to declines in water quality. Most waterways will improve in time if the contamination is discontinued at the source, encouraging birdlife, fish and other species	Use signage to educate people that the coastal areas are not rubbish dumps and the sea should not be used as a toilet.
to flourish. Local iwi in Waikanae studied this at Waimanu Lagoon in 2004 and	The Council will support and encourage community groups cleaning up beaches and streams.
noted birdlife returned quickly and species flourished after the gates from the estuary were frequently opened and flushed out the paru	The Council will remove large inorganic items which cannot be moved by the community groups (litter does not include driftwood, only in-
(pollution).	organic materials).
The 'Freshwater Vision for Ōtaki' contains principles which may be applicable across the District.	The Council will investigate the suitability of the Ōtaki Freshwater Vision principles to the whole district and use these where applicable when developing implementation plans for the coast
Another huge source of contamination is from farm runoff which can flow overland directly into lakes and streams. The majority of such waterways are unmanaged and as a result carry many contaminants such as fertilizers, faecal coliforms from stock in the waterway itself and pesticides.	Awareness of good riparian management practices is growing but still has further to go. The benefits are cleaner, healthier waterways with greater amounts of life (more fish in estuaries and lagoons and more whitebait).
	The Council will assist with riparian planting when stream banks are fenced off from stock to reduce run off into streams.
There are also fast growing non-locally indigenous native species that have the potential to become a problem on the coast. These include Karo and Pohutukawa as they seed extensively, tend to out-compete local equivalents and can become invasive.	These will only be removed in conjunction with community groups undertaking restoration projects if the group wants these plants managed. Coastal residents will be encouraged to plant locally indigenous species instead.
Gardening in the dunes with exotic species such as Kikuyu, Iceplant and Agapanthus causing erosion and spreading weeds.	
Blurring of boundaries between public and private land.	Garden dumping and gardening in the dune margins will be specifically discussed and prohibited as part of the Beach Bylaw review .
Kapiti Coast is unique in that the coast is well linked to forests, rivers estuaries and marine areas of national importance including the Tararua Forest Park, Kapiti Island, Waikanae Estuary and Kapiti Marine reserve.	A landscape or natural character assessment of coastal areas will be undertaken to assist in identifying key landforms and features to be protected or enhanced.

Litter on the beach can be a problem causing injury to wildlife and humans and polluting the ecosystem.

Garden dumping by residents spreads weeds along the coast, causing dunes to be less stable than if populated by native species.

Damage to vegetation, particularly foredune plants and grasses, causing erosion by indiscriminant **walking** and use of unauthorised accessways. Dunes are the first line of defense against erosion due to storms or sea level rise.

Dunes and estuaries are treated as a playground for **vehicles**. This can damage fragile vegetative cover and disturb or destroy bird nesting habitat.

The removal of **driftwood** and stones increases erosion risk and removes important habitat for invertebrates and potential nest sites for birds.

Response

The Council will assist groups involved in regular **litter removal** on the coast and will remove large inorganic items such as abandoned cars when required. **Council officers** on the beach will pick up litter as well as enforcing bylaws.

Litter including garden dumping will be included in education campaigns and **enforcement action**.

Access to **sensitive areas** will be restricted during nesting times. Access tracks will be combined and upgraded where possible.

The community will be **informed** on dune care and the importance of **coastal vegetation**, particularly sand binding plants on the foredune with the ability to recover from storm damage (Spinifex and Pingao). Education is needed to highlight the fragility of the dunes from feet, vehicles and other disturbance.

The Council will assist with interpretive signs at **community group** dune restoration projects to educate on coastal processes and sensitivities.

The beach and dunes need to be zoned 'open space' in the District Plan so rules and standards can be applied especially where no esplanade reserve exists.









harvesting

Local iwi recall a time not so long ago when there was such an abundance of **kaimoana** (seafood),

that it was never necessary to be greedy or take more than was needed. If a large **food gathering** took place it was only ever to share with families who were not fishermen/women.

Fish and other ocean delicacies were the **staple diet** of most Māori whanau on the Kapiti Coast. Many recalled literally 'living off the land' through harvesting fruit and vegetables and heading to their food basket (the coast and shores of the Kapiti Coast).

Harvest from the sea and the coast continue to be important to the wider community although few are fully reliant on it for survival. Food resources are **valued** by the whole community in different ways. For some, fishing is **recreation**, not necessary food gathering.

The Beach Bylaw 2002 prohibits the removal of any material from the beach in any quantity. This is not considered reasonable as most resources on the coast can be sustainably harvested without damaging the ecosystem. The proposed management is to review the Beach Bylaw 2002 to allow well managed and monitored

harvesting in appropriate locations when resources are plentiful, but restricting harvest in sensitive areas both seasonally or when over harvesting has occurred.

This can damage fragile vegetative cover and disturb or destroy bird nesting habitat.

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The importance of coastal vegetation, particularly sand binding plants on the foredune with the ability to recover from storm damage (Spinifex and Pingao). Education is needed to highlight the fragility of the dunes from feet, vehicles and other disturbance.

The Council will assist with interpretive signs at community group dune restoration projects to educate on coastal processes and sensitivities.

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Challenges - understanding the resources

The range of **fish and shellfish** along the Kapiti Coast was once abundant. Flounders, sole, shark, kahawai (mullet), snapper and para (frost fish) were some of the readily available species caught from the beach. Fresh water mussels, koura (fresh water crayfish) and 27 different species of shellfish, including pipi, tohemanga and tuatua were all eaten.

Tuna heke (the migration of eels from lakes to the sea) was an important activity for Māori. It provided long term sustenance as eels could be dried and pickled for later use. Sadly these no longer take place as many streams have dried up or the lakes have been polluted. Eels are still fished but are now a species managed by a quota system with a recreational bag limit.

Response

Understanding of **cultural values of the coast** can be expanded through education. This is particularly in relation to the degradation of food resources due to human action.

Signs on the coast that manage use also include explanations of what the problems are and why the actions are being taken.

Annual Coastal Walkshops linked to the Annual Coastal Forum and the work of local stewardship groups used as a means to inform people.

Work more closely with iwi and hapū to find ways to inform people of traditional Māori knowledge and ideas about the coast. Work together to restore habitat for eels and other species.

- maintaining the resource

Structures in waterways such as culverts can block the ability of fish, including eels to swim up rivers and streams during spawning time. At present the **whitebait** swim into the **Waikanae Estuary**, trying hard to get up further to spawn but are unable to. They lay their eggs in weed around the estuary banks which later get washed out to sea.

This has major impacts on replenishing stocks for future harvest.

Shellfish beds may be damaged and nesting birds may be disturbed by **vehicles and horses**.

Construction of fish passages to assist in movement of aquatic species, this can be as simple as providing a rougher surface on the base of culverts or placing culverts lower in the stream bed to ensure constant water flow. When fish passages are to be constructed consult with Department of Conservation.

Consider permanent or seasonal restrictions to ensure **sensitive areas are protected** from damage either through District Plan rules, ByLaws or non regulatory methods such as Rahui.

Challenges	Response
Pipi beds have been severely damaged in some areas by stones and cars on the beach. There is a community view that since the Waikanae crab fishermen stopped operating, the crabs are now eating the pipis. There is a concern that snapper have been taken by fishing boats observed fishing off the Marine Reserve. Shellfish rely on quality clean water reaching the coast to grow. The degraded state of many streams may have contributed to the decline in shellfish available. Water quality downstream from pine forests has been identified as having a significantly detrimental effect on shellfish populations. Pines are very big users of water often drying out ephemeral dune lakes and wetlands much quicker than native trees. Pine needles release chemicals which inhibit the growth of other vegetation where they fall. This can affect the shading of the estuaries and streams, which affects stocks and species regeneration.	Research into current status of 'life' on the coast was undertaken by Greater Wellington. The findings will be part of education about the needs of shellfish populations. Promote and encourage riparian planting to improve fish habitat and work with Greater Wellington and other agencies to identify and control pollution before it reaches the coast. This may include working with Horizons MW Regional Council due to downstream effects. Explore using seasonal vehicle restrictions on the beach, in areas of major shellfish beds. Encourage the planting of trees other than pines near known shellfish beds and around coastal wetlands. Through iwi management plans, work with iwi to enhance shellfish beds improving resource availability.
Pingao is valued both as a weaving material and also for its sand binding abilities. It is very susceptible to damage from rabbits and increased pest management will be required to achieve successful planting.	The Council's coastal planting activity will be reviewed to consider planting enough to provide a weaving resource to support local harvest while sustaining erosion management and dune restoration goals. The Council has planted over 3,000 Pingao plants in the last 2 years and will continue to plant Pingao as part of dune restoration projects. Anecdotal information suggests it may be possible to grow Pingao away from the coastal edge. This is being investigated and may be an option for growing a weaving crop.
Concern about uncontrolled harvesting of materials from the beach which could cause erosion threatening properties. In particular, large amounts of stones (trailer loads) are being removed from Te Horo Beach and driftwood from Waikanae Beach.	Education programmes delivered through various mediums including 'Coastlines', a programme of beach care with schools, brochures and signage at beach accessways.

Challenges - managing the harvest

Coastal resources including weaving materials, hangi stones, carving materials (wood and bone), firewood and fencing materials, landscape supplies (stones and sand) are no longer as available due to some people taking more than allowed or required.

Seafood Harvest is controlled by the Ministry of Fisheries regulations. Whitebait harvest is regulated by the Department of Conservation. These regulations need to be adhered to as well as any rahui or other local restrictions.

There is concern regarding the **over harvesting of shellfish beds**.

Access for whitebaiters and fishing people to key sites during the seasons.



Response

Assist with **education on harvesting** to ensure that the public know never to harvest more than is needed.

Recognise that harvest on the coast is important -eg firewood and hangi stones.

Undertake a bylaw review to consider limiting the harvest of wood or plant materials at a level of 'human power' only, for example, what can be gathered and removed by hand from the beach, i.e. no trailer loads used for harvesting and no chainsaws.

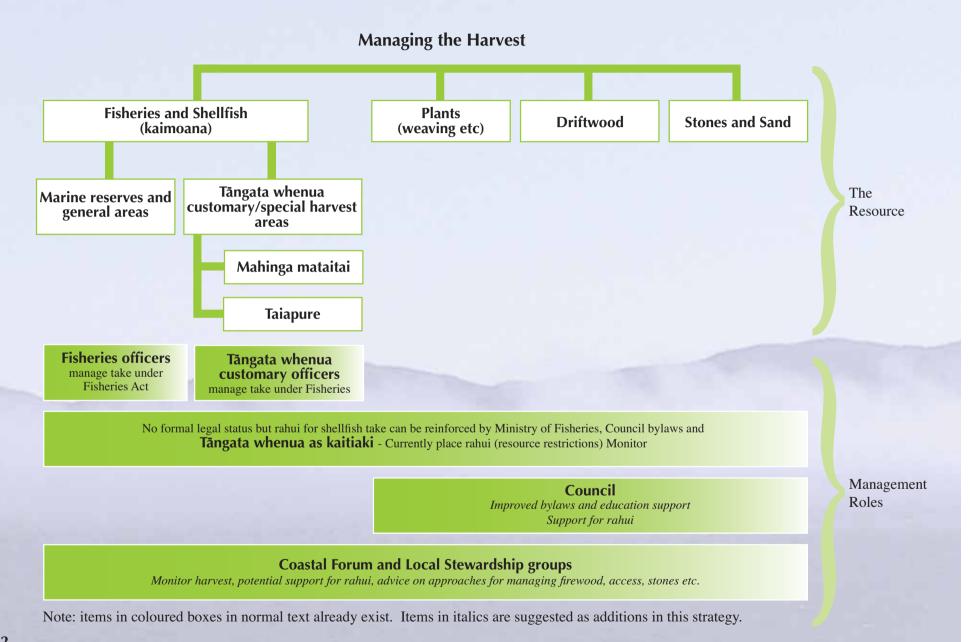
Stones - restrict general vehicle/trailer access to sources of coastal stones and work with Greater Wellington and environmental groups to direct people to other sources, e.g. stones extracted from rivers for flood management purposes are available.

Support **rahui** (harvesting restrictions) including complementary enforcement through bylaws. Support for rahui to be developed and discussed via the proposed Coastal Forum and the Local Stewardship Groups.

Manage some activities seasonally. For example, while generally access into some areas may be restricted, there is provision for managed access for whitebaiting. This should make it easier to control effects, if people know they can use certain routes and places.

Develop and publish a coastal events and harvest calendar. This will give people more information on what is needed at different times.

Undertake an annual harvesting report as part of the Coastal Forum process.



Notes:

- (i) The Fisheries Act 1996 ensures the sustainable use of fisheries resources. General fishing rules (quota management, fish sizes and catch limits) and restrictions in marine reserves are enforced by Fisheries Officers working for the Ministry of Fisheries. Harvesting under customary rights is managed through a permit system administered by Iwi Fisheries Officers. Other management tools include taiapure and mataitai reserves, as well as temporary measures rahui. Rahui may be formal (under the Fisheries Act) or informal and locally managed.
- (ii) Taiapure are local fisheries areas given special status to recognise rangatiratanga. Management arrangements can be established for taiapure that recognise the customary special significance of the area to iwi or hapu as a food source or for spiritual or cultural reasons. Mataitai reserves are formally identified traditional fishing-grounds. Once Tāngata Kaitiaki have been appointed an application can be made to the Minister of Fisheries to declare an area (after consultation) to be a mataitai reserve. There are very few taiapure or mataitai reserves throughout the country and none on the Kapiti Coast.
- (iii) Rahui could either be site specific e.g. Waikanae Estuary around the lagoon outlet pipe for whitebait, or broader e.g. Te Horo Beach for crabs. Regular seasonal rahui could also be placed on access to bird nesting areas. Bylaws and the seasonal calendar could assist with this.
- (iv) The Coastal Forum, the Local Stewardship Groups and tāngata whenua would have the opportunity to come together to discuss matters across the different resource groups, eg firewood to fish; determining the best way to manage the inter-related ecosystems, especially in key areas, the effect of river and flood management activities on shellfish beds; and ensuring management actions link with other management plans and community visions, eg the Freshwater Vision for Ōtaki developed as part of the Council's Greater Ōtaki Project.
- (v) Beach Bylaws have a role in controlling access to the beach and activities on the beach. The bylaw will be reviewed to ensure better management of impacts on degradation of food resources and to recognise access to mahinga kai (places where food and other resources are traditionally gathered) when it is needed, such as during whitebait season.



getting to the coast

Access to the coast is vital to the lifestyle of the Kapiti Coast community and public access

for vehicles, pedestrians and other users is provided in many locations. Access to the beach is controlled to ensure public safety and to protect the natural systems and character of the coastal environment.

Vehicle access is generally needed for launching and retrieving boats, for harvesting shellfish or other natural resources and for emergency vehicles.

There is very limited access for disabled people and people pushing prams. Many of the public accessways are subject to rapid change due to wind and wave action and need regular maintenance.

The overall strategic response is to review existing public accessways and upgrade them, reduce paths across the dunes especially those used by individual properties and consider seasonal access restrictions to protect sensitive areas.



Aerial photo showing frequent tracks across foredune in urban area

Challenges

There are four official public **vehicle accesses** to the beach at Ōtaki, three in Te Horo, one in Peka Peka, two in Waikanae, two in Paraparaumu, three in Raumati and one in Paekakariki. However, it is clear there are many more places where people in vehicles currently gain access and drive along the beach.

The use of motor bikes and four wheeled quad bikes causes considerable and permanent **damage to the dunes**.

Response

All **vehicle access**, including motorbikes and quad bikes will be **restricted** to official access points managed by the Council. Signage will clearly show which points are limited to boat launching and which are for access to drive on the beach. In open areas specify vehicle access only via marked public access points indicated on a map with vehicles moving the shortest distance to below last high tide.

Challenges	Response
Access and use of vehicles on the beach is an issue where there are many conflicting views and difficulty in enforcing rules . Note: this section covers the management of access to the beach. The use of vehicles on the beach is covered in the section about Recreation and Use.	Vehicles displaying disability parking permits will be allowed to park on the beach up to 100 metres from boat launching access points. The only other vehicles allowed to park on the beach in restricted areas, are those used for launching and retrieving boats at authorised launching sites.
una Ose.	The Council needs the ability to fine offenders against bylaws. This is currently being investigated nationally as at present only prosecution is possible. Vehicle access barriers will be investigated where practical to protect sensitive areas from damage.
There are numerous public pedestrian access ways in all urban areas, for example in Waikanae Beach there are 18 public pedestrian only accesses, but there is very limited access to the coast for elderly, young children and disabled users. Beach access tracks need upgrading ov er time to improve access for elderly and disabled users. Their location is important, eg a good location in Waikanae would be opposite shops at the end of Te Moana Road. Well designed access structures are needed e.g. boardwalks across the dunes and a back dune walkway where possible.	All access points will be reviewed and an action plan will be developed to show which accessways to upgrade , delete or maintain .
	At least one 'well designed and well planned' access point suitable for the elderly, disabled or pushchairs will be provided per beach settlement, i.e. Paekakariki, Paraparaumu, Raumati Beach, Raumati South, Waikanae and Ōtaki. These will generally be located near shops or other attractions.
	This could include upgrading existing accesses to a higher standard, possibly including boat ramps and vehicle access points.
There are concerns about horses damaging dunes and potential conflicts with other users (such as loose dogs, cycles and motorcycles, young children) on narrow access tracks. Horses and cyclists usually access the beach in mainly rural areas. Currently there are very few accessways suitable for horses or cycles even in the areas of maximum use. (Peka Peka, Waikanae and Te Horo).	Signage will clearly show which beach accesses are designed for disabled users, horses and vehicles.
	Consistent, bigger and more prominent signs on the beach and on the road will mark access points making them easy to locate.
Blokarts (and land yachts) are another significant group using the beach. Their use is restricted to the areas between northern Waikanae	A permit has been issued for Blokarts to use Waikanae Beach and improved access to the beach will be investigated as part of accessway
and southern Te Horo, and from the northern end of Te Horo to the edge of the District. Access at Waikanae Beach is limited in utility for blokarts.	review. The Waikanae boat ramp is suitable for blokarts.

Challenges	Response
Unmanaged or private access can cause blowout problems in dune areas and may damage natural ecosystems in other areas. There are too many tracks across the dunes. There are also numerous private paths directly from beachfront properties across to the beach. (refer aerial photo on page 44)	Beachfront properties in new subdivisions will be fenced off from the beach with a post and wire fence. The number of private access ways in existing residential areas will be reduced as dune restoration projects are initiated. This will be negotiated with private owners on a case by case basis.
	There will be no vehicle access from new developments directly across dunes. All access to the beach within new developments will be only via formed public beach access.
Most of the public pedestrian accessways north of Raumati cross the dunes. A variety of techniques have been applied to these paths to control erosion including fencing to limit wind blown sand, hard fill tracks, sand ladders, concrete on the path and planting around the path. These have had some success at reducing 'blow outs' around access tracks but some techniques have made access for pushchairs, older or disabled users more difficult.	Public accessways will be upgraded where possible to better meet the user needs and manage the effects on the dune system. Upgrades might include tracks with a sand ladder, compacted fill, hinged boardwalks, ramps or steps. Some will need to be 2m wide to allow for recreational access with kayaks, blokarts or horses. Public access will be provided if 100m or more of beachfront is subdivided in an area where the nearest public accessway is more than 100m from the subdivision.
Accessways need to be planned for new areas to ensure appropriate links within the community are formed and designed to accommodate approved uses for that area of the beach, ie walk, cycle or bridleways.	All access in new developments will be via the public tracks formed as part of subdivision with no access to the beach except on these paths. Paths will be within a minimum of 6m wide access-leg with 1.2m wide formed path and fenced access down foredune.
Control access to the beach to ensure user safety and protect natural systems. The current access restrictions may need to vary seasonally to accommodate this.	 Access restrictions will be managed to reflect seasonal and special uses of the coast. For example: extended vehicle access in certain areas may be permitted during whitebait season or for one-off events held on the beach such as fishing competitions; temporary alternative access routes may be allowed for iwi to exercise customary fishing rights in areas where access is not usually permitted; access to certain areas may be closed to respect rahui, or to protect natural ecosystems eg. during bird nesting season.



activities on the beach

The coast is a **popular destination** for both locals and visitors especially during the summer

months and during weekends. The *Community Plan* recognises Paraparaumu and Ōtaki beaches as destinations for visitors.

A wide range of **activities** are undertaken on the beach including; swimming, surfing, kayaking, boating, land yachts and blokarts, walking, running, dog exercise, horse riding, cycling, driving, food gathering/fishing, boat launching, race horse training, temporary events (races, carnivals, competitions). All of these activities are permitted on at least part of the beach under the Kapiti Coast Beach Bylaw 2002. Some activities including commercial activities such as boat hire require a permit to occur on the beach. Some activities are prohibited on beaches and council reserves including camping and lighting fires.

The **behaviour** of individuals on the beach has a huge influence on how the beach is perceived. One noisy fast moving motorbike can **ruin** the beach experience of picnicking families, while they may be unaware or unconcerned regarding another vehicle parked 100m away or moving slowly along the beach.

The overall strategic response is to review the Beach Bylaw to better protect the dunes from inappropriate use, set a speed limit for vehicles, monitor user satisfaction and beach usage and provide for disabled users to drive onto and park on restricted areas of the beach.





The use of **vehicles on beaches** is an issue of considerable debate with concerns relating to the potential **damage to shellfish beds**, safety for recreational users, dogs and children, the **speed of vehicles** and noise, a small number of 'hoons' causing problems such as **dangerous driving, driving in the dunes** and speeding past other users. The current Beach Bylaw permits vehicles on the beach to launch and retrieve boats and allows vehicles to use three large sections of beach (between Waikanae residential area and Te Horo residential area, between Te Horo (Mangaone Stream northern bank) and Ōtaki residential areas and north of the Ōtaki residential area). Freely provided, access to the beach is via a public vehicle access.

There is concern that any beach that can be accessed by traffic is a road and the usual road rules apply including the **open road speed limit**. The increasing use of **motorcycles** and 4-wheelers on the beach is also a concern as they are noisy, often unregistered and can cut tracks through the dunes damaging them permanently.

Moving vehicle violations, such as **speeding and dangerous driving** can only be issued by the **Police**. The Land Transport Act defines road as including beaches so all road rules need to be obeyed on beaches where vehicles are present including **licensing** and **registration** requirements.

A more visible enforcement presence is required to ensure that current and proposed regulations are taken seriously especially in weekends and after hours. Response

Current vehicle **restrictions** will be maintained, but the area on the beach where vehicles are not permitted will be extended to cover the dry sand areas and dunes (excluding dry sand directly in front of public vehicle accessways).

Set a **speed limit** for vehicles on the beach of **30kmh** only, the speed limit will apply to the whole beach.

Protect the dunes from vehicles by redefining 'dunes' in the Beach Bylaw as the area beginning 1m landward of the last high tide mark or 1m seaward of the vegetation whichever is further seaward and restrict vehicles to driving and parking outside the redefined dunes.

Restrict **boat launching** using a vehicle to within 50m of public vehicle access and boat ramps.

Allow **disabled persons** displaying a mobility sign on their vehicle, to drive onto the beach at vehicle access points and park within 100m of the access point in restricted areas.

The Council will seek an agreement with local police to deal with **moving vehicle** violations on the beach.

The Council will actively investigate the potential of individuals warranted under the Land Transport Act to **enforce licensing and registration** of vehicles on the beach.

Motorcycles are very mobile and can access the beach from most places on tracks intended for pedestrians only. These users want to "play" on the beach and dunes, testing their skills off road.

The speed limit of 30km proposed will make this impossible. As the beach is **legally a road**, it is inappropriate for these activities to occur.

Challenges	Response
There is a need to provide a place in the District close to towns for youth to have fun with motorbikes that is not a road or beach .	The Council will investigate potential locations as part of providing opportunities for youth activities. Some suggested locations to investigate for motorcycles are Otaihanga landfill in the long term, the 'old concrete plant' at Ōtaki or other vacant land.
Uncontrolled dogs and removal of faeces are a problem and needs enforcement. Dogs can become a problem in all public places if not controlled.	The Dog Control Bylaw is currently very well enforced by the Animal Control officers. Even when dogs are off leash in an official exercise area they need to be under control. Animal Control need to be informed by the public about dangerous, out of control dogs.
There have been a small number of accidents on the beach resulting in injuries and fatalities due to user conflict . These have included or could include, dogs and pedestrians hit by vehicles, horses spooked by dogs or motorbikes, children bitten by dogs and dogs or people kicked by	The Beach Bylaw restricts some more "active" pursuits such as horse riding, driving vehicles and land-yachts, to occurring adjacent to rural or less populated areas, to try and minimise user conflicts. This will continue and rules will be better enforced .
There are some problems in terms of conflicting uses which need to be better managed. The Council is currently not well informed about conflicts occurring on the beach. Community/iwi 'policing' should be encouraged, possibly beach neighbourhood watch.	Main Security and council officers will more actively enforce bylaws especially during peak use times, (summer weekends and school holidays). The community will be asked to advise Council or Main Security
encouraged, possibly beach heighbourhood watch.	when conflicts occur or Beach Bylaws are ignored.
The beach experience is very important to the community. Many locals describe their connection to the coast as 'special'. For many Māori they find it impossible to separate themselves from the whenua. It is from the whenua that sustenance is sought and this supports their wellbeing . Trips to the beach were, and still are, most often to collect kaimoana. Don't take away what people currently enjoy.	Restrict use seasonally to protect natural systems and allow resources to replenish.
	The Council will ensure that the essential elements of the coast are protected from inappropriate use and the spiritual and cultural value of the coast is not lost for future generations. This will include consulting with iwi on any management changes.
Camping is very popular especially with self contained motor caravans/ mobile homes. Visitors are staying multiple nights in beach car park areas as there is no signs or information indicating where to stay or where camping is prohibited.	The Council currently does not allow camping on any public land including beaches, reserves and roads. Selective revision of the policy will be investigated for general camping and mobile homes and signage will be erected in prohibited areas where camping is regularly occurring and in permitted areas.

There is limited **awareness** of the Beach Bylaw and expected behaviour on the beach. An explanation of rules is needed especially at major entrances to the beach.

There is no need to create additional rules but some fine tuning and **better enforcement** of existing rules is required. Check that the current areas for particular activities are appropriate for that community and refine the rules if needed, especially for blokarts. They use the beach when it is windy and less appealing to most other users and differ from traditional land yachts provided for in the Beach Bylaw. Waikanae and Paraparaumu are the preferred location for this activity due to wind and sand conditions. A review of the Beach Bylaw will occur if any of the areas are unsuitable.

Response

Educate the community on the Beach Bylaw through signage and brochures. Provide **clear signage** at entrance from road and access points identifiable at the beach. Simple effective messages on signage, saying what can be done as well as what can't.

Educate new owners as part of LIM reports and welcome packs for beach front properties. Let them know the bylaws relating to that beach and what the approved activities are eg, dog exercise or vehicles to avoid conflict with buyer expectations.

Increase **beach patrols** to a full time position with power of enforcement, for the summer months including weekends and provide an 0800 number on beach signs to report problems.

Work towards having the ability to issue **infringement** notices for breaches of the Beach Bylaw including parking in the dunes or having vehicles in restricted areas.









coastal hazards

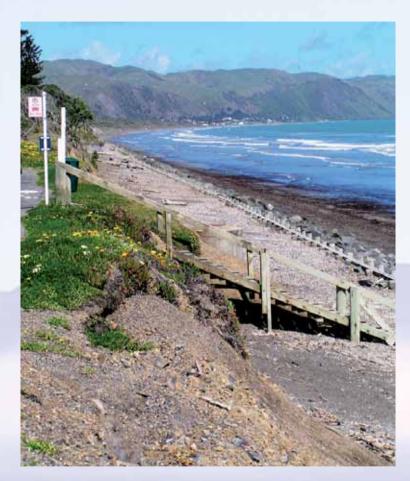
The coast is a **natural system** that accretes and retreats depending on local currents, storm characteristics,

the availability of sand and sediment and the amount of sand binding vegetation. Over time, development has taken place in the natural system, sand dunes have been removed and roads and buildings now stand on the beachfront. As a result **erosion** may affect public assets and private property in some areas of the coast.

The **northern** section of **coast** (Waikanae to Ōtaki) tends to consist of wide, accreting sandy beaches backed by dunes and isolated settlements. Mixed sand-gravel beaches with a low foredune predominate South of the Ōtaki River to Te Horo. The central region (Paraparaumu) consists of accreting sandy beaches backed by dunes and concentrated settlement. The **southern** sections of **coast** (Raumati to Paekakariki) have narrower beaches which tend to erode. They are backed by higher sand dunes, which, with the exception of Queen Elizabeth Park and a small area at south Paekakariki, have been densely settled.

The **Paekakariki coast** has been subject to significant episodes of erosion during the mid 1950s and mid to late 1970s. 13 homes were subsequently removed from Ames Street in the early 1980s.

Queen Elizabeth Park, which has a border approximately 3.5 km long, is situated between Paekakariki and Raumati. Considerable areas remain in a natural state, including some 200 hectares of coastal dunes. The dunes are recognised in the Park Management Plan as an important conservation feature and restoration work is proposed. The park shoreline has been suffering erosion during the last two decades, although accretion is reported to have occurred during the period 1874-1977. Erosion at Queen Elizabeth Park is known to have accelerated following construction of the Raumati seawall in 1977.



Because there is **development** immediately on and behind the foredune in Raumati and Paekakariki, there is a limited range of responses to address this problem. The shoreline north of Wharemauku Stream is somewhat more stable and toward Paraparaumu has a long term history of accretion. Past effects of erosion along this stretch of coast have subsequently recovered.

The **coastal environment** is characterised by a range of engineering structures. These structures were established over the past 50 years to control erosion and continue to influence the present coastal processes. These include structures to control river/stream mouths (e.g. Waikanae River stopbanks, and the Wharemauku Stream walls), and seawalls along the Raumati and Paekakariki coasts. Seawall construction began following a series of storms in the mid 1950s. However, much of the initial seawall was damaged during the major 1976 storm and rebuilding with more robust timber walls was carried out between Marine Gardens in Raumati and Queen Elizabeth Park, and along The Parade at Paekakariki. Subsequently, rock toe protection was, and still is, being added. Privately constructed walls of varying quality occur south of The Parade and north of Marine Gardens.

At Raumati, the **seawall** was not constructed to its full design height and is overtopped by waves from time to time. This has led to private property owners building a significant number of secondary protection structures of varying integrity in an effort to protect the embankment behind the wall. The backfilled area behind the top of the seawall, particularly at Raumati South, provides an important amenity for the community by allowing access along the shoreline at high tide when the beach itself is mostly under water along the toe of the seawall.





Erosion is caused by wind and waves. **Wind erosion** can occur at any time, moving dry sand out of the foredune system from nonvegetated areas. This can lead to **dune blowouts** which result in a gap or hole in the dune system. This is a problem when development has occurred behind the foredune because it is normally associated with sand deposition where it is not wanted, i.e. on roads or in back yards. A blowout can allow waves through the dune line, causing severe scouring and inundation. This most commonly causes problems where development has occurred close to the coast and at beach access points.

Wave erosion occurs mainly during storm events. Sand is taken out to sea by waves and forms a bar which can return following the event if the wave intensity decreases. It only becomes a problem after severe storm events remove a large quantity of sand from the foreshore. This can lead to short term, periodic episodes of erosion that may threaten houses if they have been built on the foredune. Notably, this can occur on an accreting or stable shoreline.

The other form of erosion that can occur is a net long term retreat of the shoreline due to insufficient sediment to maintain the shoreline. For example the beach at Paekakariki and Raumati South are experiencing net long term retreat of the shoreline as a result of human intervention and natural processes.

There are a number of **additional coastal hazards** which can threaten properties on the coast. **Storm-surge** can cause coastal flooding and salt water damage in low lying areas and allow wave activity to penetrate the backshore area causing severe erosion of the dune toe and foreshore. The September 1976 storm event was associated with a storm surge of 0.7 m that resulted in the destruction of the sea wall at Raumati.

Climate change effects may cause an increase in windiness and storm events which will enhance storm surge and consequent erosion. Sea level rise will increase the height of storm surge, increase the height of the MHWS and may affect erosion along susceptible lengths of the coastline. NIWA predicts a sea level rise of 50 centimetres by 2080.

The Council will ensure a **review** of base assumptions about climate change factors with the potential to affect the coast will be undertaken biannually as well as undertaking a review following any major international or national update of assumptions and rates of change, should this occur outside the two year review programme.



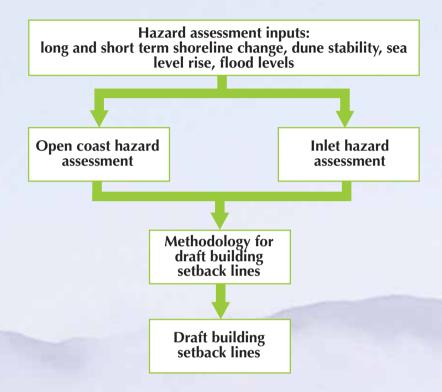
Tsunami can cause widespread damage from inundation and erosion and is a high risk to human life. There have been 6 tsunami recorded in the Kapiti area since 1855. Most of these have been small (<1.0 m), but the Wairarapa earthquake in 1855 is thought to have generated a tsunami 2.0-3.0 m high along the Kapiti Coast.

In 2005 work was commissioned for a revised **assessment of coastal hazard risk**. The coastal hazard assessment process comprises three stages, shown in the diagram below:

- Open coast hazard assessment to assess erosion on the coast. The open coast hazard assessment was completed in late 2006.
- Inlet hazard assessment to assess erosion and coastal flooding and inundation at stream and river mouths.
- Review of building setback lines.

Building setback lines will be reviewed when the coastal hazard assessment is complete in late 2007.

The research required to carry out the first phase of the **open coast assessment** will form the basis of a hazard data base. Additional funding made available through the 2006/07 Long Term Council Community Plan will build on the database and enable continued hazard monitoring as part of coastal management activities. The database is also expected to make future periodic reviews of the setback lines a much simpler process.



The components of the formula used in the erosion hazard assessment are:

sea level rise - the effects of sea level rise from global warming over fifty years, ie the rate at which the coast retreats because of higher sea levels (calculated using NIWA predicted sea level rise, together with inter-tidal beach slopes derived from the Council and Horizons Regional Council beach profile surveys).

long term historic shoreline change - the rate at which the coastline has been eroding or accreting over time, with the impact projected out fifty years (based on analysis of available data collected between 1874 and 2005; shoreline changes obtained from archived cadastral maps and aerial photographs; trends identified every 200m-500m using statistical techniques and predictions of change based on these results).

short term shoreline fluctuation - the amount of change expected as a result of storms etc. (derived using statistical techniques applied to the historical shoreline data, incorporates relevant field observations and analysis of beach profiles).

dune stability - the influence of dunes on erosion, eg higher dunes will take longer to erode because marine currents cannot instantly remove eroded dune sand (derived using statistical techniques applied to the historical shoreline data. Relevant field observation and analysis of beach profiles also incorporated).

an error component - based on uncertainty values associated with the each component. This can also be referred to as the safety factor. (The calculation is based on a planning

timeframe of 50 years. The rationale for this is the minimum life of a building specified in the Building Act. It is also thought to provide a more robust result than projecting out 100 years.)

The **pressures of land development** in coastal areas continue to grow and have escalated in recent times. This, in turn, increases the value of coastal land and property. Any decision to allow nature to take its course without human intervention, including the possible removal of buildings becomes increasingly difficult in this context.

Today **good** practice requires new development to be set back a certain distance from the coast. The setback distance should reflect the coastal hazard risk, but other factors such as natural character, amenity, and/or cultural values, may also be relevant considerations.

At present the **District Plan** contains a variety of provisions relating to subdivision and development of the coast. These include 'no-build' and 'relocatable building' zones, but the Council is concerned these provisions may not provide adequate protection to either the Council or property owners in light of present knowledge. It is important, however, to appreciate that coastal hazard management incorporates a wide range of matters that go beyond the protection of property.

The overall **strategic response** for hazards is to continue to protect existing structures on the coast while maintaining the dune areas, making them as natural as possible with native plantings and to consider soft engineering as an initial response to problems.

There is pressure for the Council to take on management of **private coastal protection** actions. The individual actions private property owners may take, eg seawall construction, could have a greater beneficial effect if managed collectively along a greater length of the coast and with an emphasis on soft solutions.

In a tsunami, one of the biggest causes of death is from people being struck by debris. The beach at Raumati South is littered with unconstrained debris that has been dumped off the end of sections and come loose from broken down sea walls. This needs to be addressed.

Erosion is part of natural coastal processes but becomes a problem when public or private **property is threatened**. During extended periods of stability or accretion development occurs along the coastal margin. Building has continued in Raumati and Paekakariki regardless of the longterm erosion.

The pressures for **land development** have increased the value of coastal land and property. Erosion places assets at risk, raising the question of whether they should be protected, and if so, at what cost.

Significant **erosion** is expected over the next 50 years in the more highly developed areas in the south of the District.

The shoreline between Paraparaumu and Ōtaki has advanced between 50-200 m since 1874. There is an issue with the Waikanae River mouth works reducing the sediment supply to the beach south of the River and there have been episodic erosion events linked to storm damage.

Response

The Council will continue to **protect only public assets** (except existing protected areas at Raumati and Paekakariki) with engineering solutions.

Sand-binding plants (Spinifex) will continue to be provided to property owners to **encourage accretion** in suitable sites.

Investigate whether the Council can hold resource consents for **emergency coastal protection works** on behalf of private property owners.

The Council needs to **enforce** much tighter restrictions on the type and style of structures that people are allowed to build off the end of their sections.

Investigate options for funding coastal protection works including:

- reinstating the **rolling fund** to build up reserves for coastal protection activities
- **carrying over** unspent budgets in any one year and retaining funds for future protection works
- collecting a **targeted rate** from beachfront properties specifically to pay for coastal hazard management

An assessment of **erosion hazard** for the open coastline has been finalised.

An assessment of hazard risk at river and stream mouths will be completed in early 2008.

Challenges	Response
Sensible coastal management practice requires new development to be set back a certain distance from the coast. The setback distance should reflect the coastal hazard risk, including inundation from storm surge and tsunami as well as other factors such as natural character, amenity, and cultural values.	The erosion hazard assessment will form the basis of a review (and possible revision) of development setback lines in the District Plan. This will be a publicly notified and consulted on as part of a District Plan Change in 2008.
Where development already exists there can be practical difficulties in revising or establishing planning restrictions.	There will be consultation on the methodology for reviewing the setback lines. A case by case approach may prove to be appropriate in more developed areas to the south of the District. This is to take account of existing structures which may vary in terms of hazard risk management.
The current building setback has been in place since 1976 when significant erosion occurred on the southern portion of the Kapiti Coast. The current developments on most parts of the coast were established with the setback in place.	As a general principle, to protect existing amenity , any revisions will not move building lines seaward of the existing lines.
More data and knowledge of coastal hazards needs to be gained to lead to a greater understanding of coastal processes and beach responses to waves, weather and climate of the Kapiti coastline. This leads to more informed planning and management decisions. A greater range of data needs to be collected, eg wave height, to help monitor and manage the coast.	From 2006/07 long term budgets will include increased investment in data collection to enable improved monitoring of the effects of changed management on the shoreline.
	This will include continuing with regular beach profile surveys along the coast to monitor changes in shoreline position and geomorphology.
To manage the coast as a whole, greater partnership is required between Kapiti Coast District Council and Greater Wellington, and potentially other authorities to the north whose coastlines have a direct effect on the Kapiti Coast.	Encourage other local authorities, especially Greater Wellington, to work collaboratively on data collection, monitoring and management activities.

A **consistent approach** to hazard management techniques among private property owners, district and regional councils would be beneficial.

'Emergency must mean emergency' - the community would like to see a more **proactive** approach to coastal protection, ie using trigger points to determine the means and timing of agreed primary interventions to be attempted well before emergency work is required. Investigate developing **local coastal management plans** with an erosion prevention/coastal restoration focus, to be implemented through local stewardship groups. This could include the early 'trigger point' interventions and dune restoration/planting activities.

Investigate developing trigger points as part of asset maintenance and management regimes.

Community outcomes and management principles require interventions on the coast to be as **natural as possible**.

'Soft' solutions can take much longer to establish than hard structures and it may take many years, some significant delays and costs, before they can realise their protective potential. Depending on what soft solution is used, they can often be 'sped up' with sand renourishment.

Where possible, **soft engineering solutions** such as beach drainage or nourishment will be the first option for protecting public or private property. However, some sites will always require **hard structures** to provide a minimum level of protection. Engineered structures can also be massively expensive. They also require costly ongoing maintenance if they are to remain effective. Some soft engineering solutions are very expensive, such as beach dewatering schemes.

Continue to plant dry sand above MHWS with **sand binding** vegetation, and consider **more widespread restoration** of beach/dune areas.

The accessway review will include consideration of the potential erosion impact of access points. An action plan will be developed to show which accessways to **upgrade**, **delete or maintain**.

Investigate requiring coastal property owners/developers to build and plant appropriate protection structures/backstops to **encourage accretion**.

Clearing sand and driftwood from **stormwater outlets** and stream mouths following storm events reduces the amount of material available for accretion.

Sand removed during stormwater maintenance is deposited in the **inter-tidal zone** in immediate vicinity of the outlet from where it was cleared (drain outlets, streams, estuaries).

Natural landforms and features that provide some **hazard protection**, eg dunes, stone beach at Te Horo, are under threat as a result of human actions, such as removing stones.

Response

Vehicle access at Te Horo Beach has been restricted to prevent stones being removed. An alternative **source of stones** is available, for collection by trailer from the Ōtaki River, on the north side of the bridge (by arrangement with Greater Wellington Ōtaki Depot).

The general guidelines for taking of gravel are:

Extraction is limited to what one person can lift by hand or shovel. No mechanical means are allowed, People can take up to 15m3 per year.

Only a car boot or a trailer can be used to remove gravel.

People may only collect from areas that have been designated to them by Greater Wellington staff.

Estuaries and lagoons form at stream mouths due to wind and wave action. These are 'cut' periodically, (by Greater Wellington), digging a straighter channel to the beach to prevent flooding upstream.

The Council will treat the coastal plain as one **ecosystem** - integrate stormwater and flood management with coastal management. One area of integration that needs addressing is the draining of storm water onto the backshore of a beach. This impacts on the stability of the foreshore and seriously exacerbates erosion, particularly in storm events.

Work towards achieving **consistency** between Kapiti Coast District Council and Greater Wellington in the use of coastal and flood management **trigger points**.









built character

There is great interest and concern regarding development close to the coast.

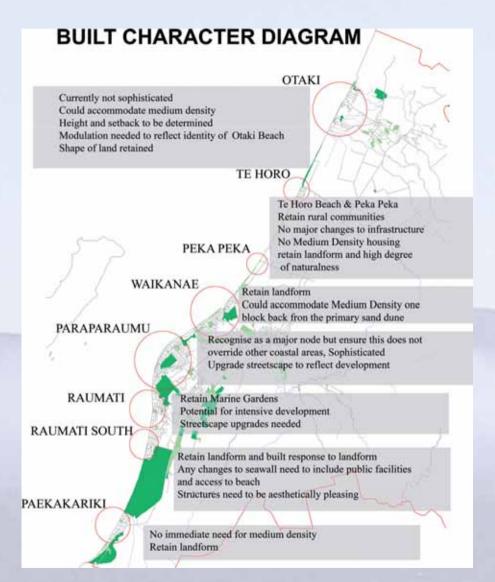
There is concern regarding, view of buildings from the coast, erosion or flooding of coastal properties, design of structures including buildings ruining the wild character, damage to natural ecosystems and loss of amenity, character of the coastal settlements and the potential to end up with a totally developed coastline.

Kapiti Coast consists of two long gently curved coastlines with a cuspate sand peninsula between them at Paraparaumu. The coast has been very accessible in terms of development. In early years it was used for its abundant kaimoana and as an agricultural/horticultural resource. It developed as a holiday playground serving Wellington. The areas of holiday housing were initially mostly in Paekakariki and Raumati, with more permanent settlement in Ōtaki.

More recently the urban areas have been redeveloped, infilled with new, large houses and in the rural area lifestyle block development has accelerated.

The built character of settlements is part of the identity or sense of place for the community. There is a strong desire to protect the built character of some areas, particularly the older beach areas.

The overall strategic response is to protect character areas in the District Plan, ensure the building setbacks from the coast include consideration of amenity and ensure protection works are as minimal as possible and do not change the character of settlements.



In more recent years **coastal development**, especially lifestyle blocks has been aggressive with large tracts of the coastline, both rural and urban, now under varying forms of built development.

Within the urban areas along the coast the predominant activity is **residential housing** interspersed with small areas of open space, active and passive recreation opportunities and facilities, roads, car parks, and a little retail.

Within the rural area large blocks of land have been divided up into lifestyle blocks. This has compromised the open character of the coastal plain. The large number of subdivisions and houses along the coast is a concern for residents.

Developments have **associated structures** and access points that impact on the beach experience and the public realm including seawalls, power poles, stormwater outlets, boat ramps, fences, signage, bins, lights, noise, smells, and gardens.

Some parts of the Kapiti Coast have a distinctive **built character** when viewed from the coast. Paekakariki is an example of this. In other areas such as Peka Peka few buildings in the residential and rural areas are visible from the beach. The visibility may change if dune systems are eroded as happened at the north end of Manly Street, Paraparaumu.

The quality and character of buildings and structures visible from the coast can have a significant effect on the experience of the coast.

Ōtaki and Te Horo residents like their communities as they are and don't want to see the character change.

Response

Protect identified **character areas** or features in the District Plan, including tightening of rural subdivision and development provisions and preservation of existing viewshafts across public land. The development of urban limits and better clustering of development in rural areas to preserve open character.

Provide regulatory controls;

- to ensure that new structures are setback from the coast to minimise visual effect from beach (proposed to keep existing lines where risk is shown to be less as existing views and amenity would be affected by moving the line coastward).
- To ensure only low density lifestyle development is allowed with strict controls. eg clustering of buildings to protect open space and rural character.

The current **building setback lines** have set a pattern of development and amenity for residents that would be eroded if setbacks were 'reduced' (moved seawards). In order to protect **amenity** of existing areas, setbacks will not be reduced in these areas even if coastal erosion risk has decreased due to changed management.

Describe the special **character** of Ōtaki Beach and promote appropriate rules and design guides to maintain character. Assess unique features of each area and protect valued aspects and develop these into local outcomes in the LTCCP process. (*Long Term Council Community Plan*)

Reinforce that new houses retain beach/village **character** particularly in Raumati South. Natural contours of land to be followed with buildings.

Challenges	Response
There are concerns regarding hard built edges against the beach, with graduated height and density increases suggested to minimise this.	Consideration will be given to the use of vegetation to soften built edges as part of building setbacks to maintain and enhance character.
There is the potential for development on the coast to have adverse effects on the coastal experience due to building height , setback , shadowing and visibility from the coast. This is also true for structures such as seawalls.	Consider the design of all structures visible from the coast including protection and access structures to ensure that these do not adversely affect the natural character of the coast.
The built environments, associated activity, vegetation and the underlying landform define the landward coastline edge. These factors give rise to areas of different character that have different value attributes in terms of coherence, integrity, amenity and legibility.	Consider lower building heights for beachfront properties. Height restrictions on beachfront should relate to landform (high land should have lower building allowance related to MHWS-Mean High Water Springs) Present height may be destroying values (both living and financial) for people who live one step back.
	• Keep 70m building setback from beach at Peka Peka as a minimum.
	Keep 100m minimum setback in rural zone.
	 Setback - restrictions need to be a balance between private owners' willingness to take a risk and the Council's need to protect public safety.
	• Include consideration of privacy for beachfront properties.
Privatisation of the coastal margin (encroachment) is common along the coast. Structures on public land are common across the country causing potential health and safety concerns.	Encroachment will be reduced through education and enforcement of the Beach Bylaw.



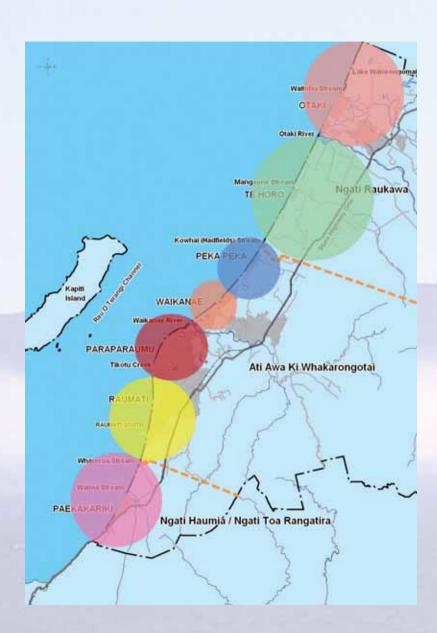
Local Area Action Plans

Many issues are specific to local areas, such as stones being removed from Te Horo Beach or disabled access in Raumati and Paekakariki. Local action plans deal with these specific issues. There are seven local action plans covering the coast sitting within the three iwi rohe.

The three iwi (ART) and their hapū acknowledge shared resources. The northern area for Āti Awa ki Whakarongotai is Kukutauaki No 1 which sits alongside Peka Peka Road. The area covered by the Peka Peka local action plan falls within two iwi rohe areas.

Iwi and hapū are developing management plans which will involve coastal matters.

Ōtaki	Ngāti Raukawa ki te Tonga
Te Horo	Ngāti Raukawa ki te Tonga
Peka Peka	Ngāti Raukawa (Kukutauaki north)
Peka Peka	Ati Awa ki Whakarongotai (Kukutauaki south)
Waikanae	Āti Awa ki Whakarongotai
Paraparaumu	Āti Awa ki Whakarongotai
Raumati	Āti Awa ki Whakarongotai
Paekakariki	Ngāti Haumia
	Ngāti Toa Rangatira



Ōtaki

Ngāti Raukawa ki te Tonga

This is an established residential area where a road is located on the top of the foredune providing a setback to the building line. Baches and houses are level with or lower than the road and front the road and therefore the beach. The overall scale of the residential development is small. The property sizes are small and regular. The houses are 1-2 storey, wooden with small building footprints. House setbacks vary as does house colour. There is little infill or new construction and the density is low.

In Ōtaki there is a road adjacent to the coast providing a building setback and no esplanade reserve. There is a small local corner dairy and a café.

Ōtaki has a very low foredune with lots of reserve area and all residential development is across the road from the beach.

The overall strategic response for Ōtaki is to work with the community to resolve local problems in the most natural way possible.



Map of Ōtaki Beach areas

Challenges	Response
Would like to see NO vehicles on beach except for permitted activities. Restrict access to approved public access points especially vehicles. Improved access through the dune systems to the dry sand from the car park near the Surf Club is needed for those with limited mobility and pushchairs .	Enforcement of current rules will be undertaken. Some undesirable, unofficial vehicle accessways will be closed after further consultation with users and official accessways may be upgraded as part of the review of accessways.
When the Council undertakes remedial works, ie at boat access point, Surf Club stormwater and Waitohu Stream cutting, greater regard should be given to long term environmental outcomes eg wood stacking to encourage dune development.	The Council will always consider environmental outcomes when upgrade works are undertaken. Wood stacking can encourage dune development but is risky as during large storms it can cause greater damage if the wood is removed by wave action. Dune planting and fencing is the preferred option to encouge dune growth. Wood stacking may be used to control or limit access to sensitive areas.
Ensure that viewshafts remain between houses but due to topography the second row of houses is not visible from the beach.	No action proposed, views are difficult to protect while retaining the existing rights of property owners
The road and road reserve provides great public access to the beach as well as grassed areas and recreation facilities. The access is via the front face of the foredune.	The Council will ensure that a wide range of access is possible without compromising the simple open character of the current foreshore or cluttering it with structures.
Marine Parade vegetation is patchy and needs restoration as currently it is overrun with exotic species.	The Greater Otaki Project will address some foreshore upgrades. Restoration planting of dunes will continue.
Protection of Rangiuru Beach from sea/river flooding - raise area from floodgates to Marine Parade South, South Beach.	This will be raised with Greater Wellington as part of overview discussions. Protection issues will also be considered as part of flooding and stormwater discussions. Temporary solutions will form
A temporary 'stopbank' could be formed from stacked logs at the Otaki River Mouth. An example of this is at Bethell's Beach on Auckland's West Coast.	part of these discussions.

Keep vehicles out of the **Waitohu Estuary** and dunes. This will encourage dunes to grow.

There are a number of pollution issues around the Ōtaki River mouth including the use of tannalised posts in wetland areas, stock control issues and the abandoned landfill. These need to be cleaned up and management changed.

Rangiuru by the sea, should be signposted as unsafe for swimming.

Response

Vehicle management is being undertaken districtwide to protect dunes and **sensitive natural areas**. This will include estuaries, wetlands and dunes.

These issues will be investigated in association with Greater Wellington and the community.

Water quality issues will be investigated with Horizons Regional Council to determine the effects of waste being discharged into the Manawatu River reaching the Kapiti Coast. Where possible water quality will be improved.





Te Horo

Ngāti Raukawa ki te Tonga

Te Horo Beach is unique in the District with a stone beach as opposed to a sand beach. The stones extend south from the Ōtaki river, forming a bank in front of the Te Horo Beach settlement.

Te Horo Beach is a coastal community where residents draw water from ground bores or harvest rain water from roof tanks. Waste water is collected by septic tank systems.

Te Horo also has some of the best back dune wetlands in the District including the Te Hapua Wetland complex.

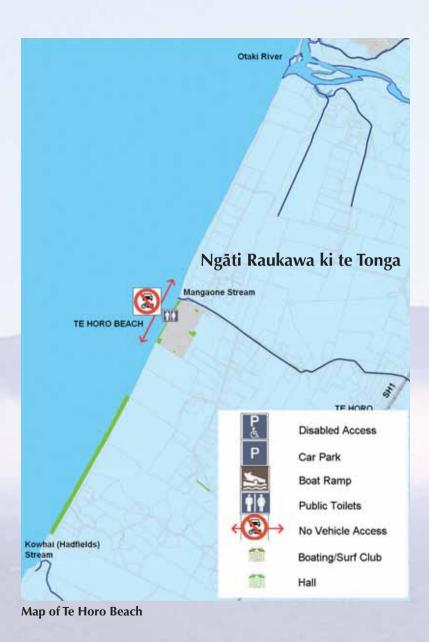
Te Horo Beach village is defined geographically by the Mangaone Stream on its northern boundary, the coast to the west and an "outstanding" dune landscape in the south and east.

The village is accessed by a single road running alongside the Mangaone Stream.

There has been considerable development around Te Horo Beach, especially along the coast both north and south of the 'village'.

The other main issues specific to Te Horo Beach relate to harvesting stones and driftwood, vehicles and water quality.

The overall strategic response for Te Horo is improved signage and education on harvesting issues, vehicle Beach Bylaw enforcement, investigation of ways to improve water quality, and control of development.



Challenges	Response
Te Hapua is an 'island' between Te Horo and Peka Peka communities. The coastal dunes and inter dune wetlands behind the back dunes are inter-related as an integral ecosystem. This wetland is one of only 3 remaining in the larger Wellington Region and the best example of its type in Kapiti. It is nationally significant.	Local groups undertaking environmental restoration projects will be assisted and encouraged when possible. The Te Hapua wetlands are ecological sites protected in the District Plan Heritage Register.
Signage at the beach is inadequate - visitors don't know the restrictions such as not removing stones (alternative source suggested if possible) and driftwood and do not value the sand dunes. Some people just ignore the signs, eg no dumping of rubbish. Therefore enforcement of rules is needed to back up signage. Damage to signage by vandals is often slow to be repaired.	Signage will be developed to inform people over the whole district. The new signage will be more robust than current signs and easier to repair or replace if damaged. Flyers have developed to inform on specific local issues and circulated to residents to distribute to visitors, or offenders on the beach. These could also be distributed to businesses such as Real Estate Agents.
There is a need for visitors to the coast to value the sand dunes. Residents can see human induced erosion occurring in places. There is a desire to see beach restoration and protection of the dune systems.	Education options will be investigated to improve visitor understanding of sensitive ecosystems. An alternative source of stones from the Ōtaki River on the north side of the bridge has been suggested. Contact Greater Wellington, Ōtaki for more details.
Quality of water in Mangaone-Paratuhi stream is a concern, often brown in colour.	Investigate improvements in protection of freshwater from pollution including educating landowners to fence off and plant riparian areas and assist the community with riparian plantings.
Damage to dunes and possibly shellfish beds caused by motorbikes and quads. Vehicles on the beach frightening when speeding occurs. Policing and enforcement difficult to interest authorities.	Vehicles will be restricted to a limited speed and only in areas where the public do not go swimming (not opposite residential areas).
The degree of coastal development is a major concern for residents. Communities of holiday houses are valued as character.	Any changes to existing rules either in the District Plan or Beach Bylaw require extensive public consultation .

Challenges Response

For the foreseeable future Te Horo residents see little need for future management strategies other than those currently in place, i.e. Mangaone Stream mouth maintenance, provision of public toilets and changing facilities.

There are no plans to reduce the building setback for Te Horo Beach at this time. This will protect the existing **character** of the beach. If the hazard risk assessment shows there is a need to set future buildings further back to reduce risk, the setback may change.

Friends of Te Hapua Dunes and Wetlands urge the Council to acknowledge **Te Hapua Wetlands** as a **unique** feature to keep intact from development and to look at restorative planting and s221 (of the Resource Management Act 1991) protection for future generations.

Te Hapua wetlands are recognised **ecological features** in the District Plan now. The vegetation is protected and assistance with restoration planting and weed control is available through the Heritage Strategy.

Camping is a problem at Te Horo Beach. There is no signage or education on camping in the district.

Current policy is no camping on council land including roads, carparks and beaches. Options will be investigated to provide for self contained motor homes to camp overnight in some areas and increase education on where camping is not permitted.







Peka Peka

Ngāti Raukawa (Kukutauaki North) **Āti Awa ki Whakarongotai (Kukutauaki South)**

This local area plan for the Peka Peka settlement and associated beach falls within two iwi rohe areas.

From Peka Peka north in the rural area there is a 50 m esplanade reserve with some 20 metre wide reserves in the higher density rural hamlets.

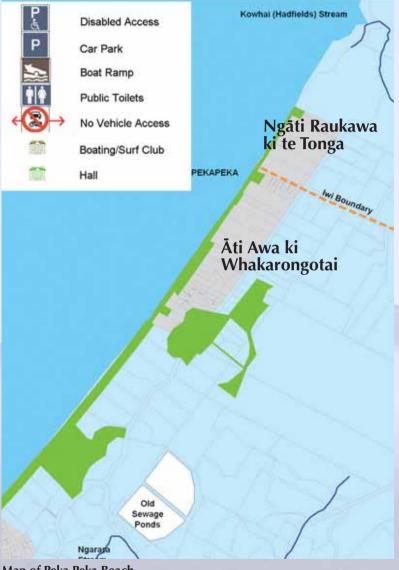
The coastal strip from Peka Peka is one of the last largely undeveloped areas of coastal private land in the District, (the other is north of Otaki). The **preservation** of this strip is essential if it is to be considered a high value biodiversity example in Kapiti.

Peka Peka enjoys the reputation of being a free beach where all activities are permitted including horses, dog exercise, vehicles, land yachts and all pedestrian and water based activities.

There is only one public vehicle access (at the end of Peka Peka Road) and two additional pedestrian accesses at Marram Way and in Pharayzn Reserve (south end of Paetawa Road).

Residents like hearing horses training on beach.

The overall strategic response for Peka Peka is improved control of vehicles on the beach, assistance with dune planting, ensuring safety for users and protecting biodiversity.



Map of Peka Peka Beach

Challenges	Response
Real estate agents need to be in the education loop as they misinform buyers.	More education will be developed for the whole community on coastal issues. This will occur at all levels, in schools, newspapers and on radio.
Motorbikes, quad bikes and hoons are a problem. It is not safe for anyone else who's not on a motorbike or quad bike. Particularly a problem in weekends and evenings.	Speed limit is to be set 30 km/hr districtwide with increased enforcement. Permit only will be considered if vehicle use does not change. Enforcement will be considered on weekends.
Beach must be made safer for children to play . Don't lose recreational character of free beach but restrict all vehicle speeds and enforce road rules re registration, licences and dangerous behaviour. If this does not solve problem consider permit only system.	The Council will consider weekly 'no vehicle' day on Peka Peka Beach. The proposal is to trial this on Sundays throughout the summer beginning in 2007. There will be signage at the public vehicle entrance and a beach patrol presence required.
Sewerage ponds (decommissioned ponds between Waikanae and Peka Peka) should be restored to make it a natural wetland.	There is a management plan to develop this as a wetland. The work will proceed in several stages. The first stage of planting started in August 2006.
Support the development of a community group to assist with restoring sand dunes and beach clean up. Care Groups could give assistance to private access owners.	Look into the restoration potential in the dunes in association with local residents and the possibility of a dune care group being established and support if/ when established.
In keeping areas natural it must be recognised that there are existing users and development allowances within the District Plan.	Development in these areas is recognised activity providing it is carried out in sympathy with the environment and the District Plan.
Dogs can be a problem, free beach but dogs must be controlled verbally if off lead, owners need to take responsibility to control dog and clean up mess.	Dogs can become a problem in all public places if not controlled. The Dog Control Bylaw is currently very well enforced by the animal control officers. Animal control need to be informed by the public about dangerous, out of control dogs.
Toilets at public entrance possible but not a consensus.	Toilet if required needs to be as sustainable and natural as possible eg composting or underground (grass roofed) toilet.

Waikanae

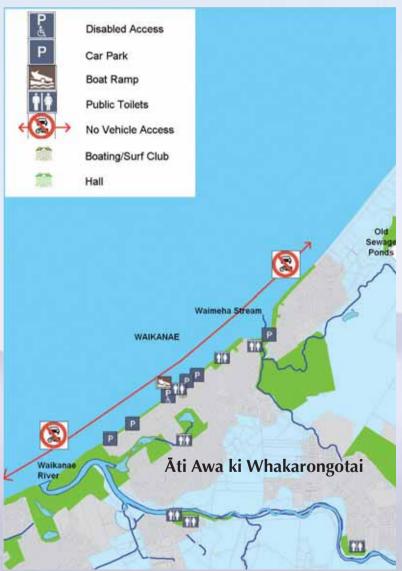
Āti Awa ki Whakarongotai

This is an area that was once dominated by baches but is now establishing as a residential area. There is a mix of housing types ranging from older single storey small wooden baches to 2-3 storey modern houses. There is a single row of houses between the reserve and the road.

There are no **views** to the beach from the road. There are tall Macrocarpas and a grassed area in the recreation reserve. Within the beach settlement there is a presence of old established Macrocarpa hedges.

There is a local store and public tennis court and recreation reserve adjacent to the beach in the older beach house area.

The overall strategic response for Waikanae is to assist local groups with dune restoration, review accessways and upgrade where necessary, investigate reducing unofficial accessways and retaining natural areas.



Map of Waikanae Beach areas

Challenges	Response
There is generally a building setback of 20m along the coast in Waikanae. There are locations where reserves make this open space set back wider. Protect the valued privacy and views of residents as well as the openess of the beach.	Setback will be reviewed based on hazard risks. It is unlikely that the setback will be reduced in Waikanae, this will protect the amenity of existing properties and the beach experience.
Consider removing all boxthorn behind the foredune in Waikanae. Area to be restored at the end of Waimea Road needs spraying of buffalo grass . Now ready for planting with Spinifex and Pingao.	Weeds will be controlled as part of a districtwide weed management approach, but specific local problems can be considered as part of a dune restoration project with a group of residents.
A sign is desired at dune restoration sites to educate the general public to say what is being attempted. Residents would like Pingao to plant between the Spinifex by the boatshed north, also suitable coastal plants and shrubs to plant behind these.	Continue with restoration planting projects for care groups. Link dune care groups for an annual debrief i.e. lessons learned to date restoring dunes. From this, future planters may improve success rate. The Council will provide sufficient Spinifex to residents to replant in areas in front of Stonewall Grove and other locations in Waikanae.
More regular flushing of the Waikanae lagoon is needed to allow fish in and out and release pollution.	The Council will work with Iwi, Department of Conservation, Greater Wellington and the community to achieve management improvements for the lagoon.
Public access is via car parks on the sand dune between houses. It is close to barrier free. Facilities are provided at some of the accesses. Disability access to the wet sand area of the beach is required.	Accessways will be reviewed and upgraded where necessary. Several unofficial accessways have been closed in recent years as part of dune restoration projects.
	Suitable access for vehicles displaying mobility stickers will be maintained at the Waikanae Boating Club.
	Promote the Waikanae Estuary as a destination for bird watching.
The Council should have a clear policy on where camper vans should park up. i.e. Rangiharoa St (Council depot).	The Council has a clear policy that camping should occur in camping grounds or on private property with the owner's permission.
	This policy may need to be reviewed to provide appropriate locations for self contained Motor homes to park overnight. Signage noting prohibited areas such beach car parks may also be necessary.

Paraparaumu

Āti Awa ki Whakarongotai

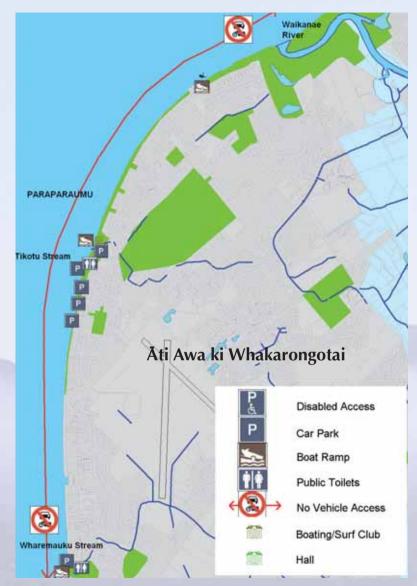
Paraparaumu Beach is the central residential area in the District. It includes a mixed use Beach Town Centre with some high density apartment living and a large beachfront recreation area (Maclean Park). Buildings within the town centre are up to four stories high with no view shafts between buildings and no room for vegetation on private properties. There is clear definition between public and private space.

The streetscape is formal with provision of car parks and various public facilities. Maclean Park is one of Kapiti's premier parks. The presence of stone retaining walls and buildings on the foreshore create a strong built character to the foreshore reserve.

The beach front residential areas have distinct characteristics depending on whether or not there is a road between properties and the beach. Along Marine Parade there is a 2m+ bank to the road but the underlying topography of the built-up area is flat. The houses in the second row back do not overlook the beach.

The Manly Street residential area consists of houses directly fronting the foreshore. Housing is generally on individual sections with a 20m esplanade reserve providing a building line set back. The underlying topography is flat, which creates a beach that is open, feels safe and not crowded in by buildings.

The overall strategic response in Paraparaumu is to assist dune restoration groups, reduce unofficial accessways, investigate water quality and stormwater improvements, educate on weeds and garden dumping and control development.



Map of Paraparaumu Beach areas

Challenges	Response
Protect the Waikanae Estuary from damage by vehicles entering from Paraparaumu Beach (physical barriers may be needed such as on the Waikanae side).	The most appropriate method of protection for the Waikanae Estuary will be sought in conjunction with the Department of Conservation, Greater Wellington and the community.
Paraparaumu Beach character is changing to incorporate apartments . These are seen as a mixed blessing, bringing residents and activity to the beach and making the retail activities more viable, but changing the	Apartments, limited in height to 12m as part of a mixed use town centre where retail activities occur on the ground floor, are becoming more common at Paraparaumu Beach.
character of the beach. Keep development on the beachfront set back to keep beach views. Review District Plan to ensure development is controlled and character retained in low density areas.	The design of these need to take into account the location, scale and character of Paraparaumu Beach and ensure that they do not override the experience for visitors to the beach and Maclean Park.
Water quality and erosion caused by stormwater pipes needs to be addressed.	Stormwater is a major issue for the Kapiti Coast especially in Paraparaumu and parts of Raumati where localised ponding frequently
The frequent concrete pipes across the beach are currently unacceptable and ugly.	occurs. All of the piped stormwater ends up on the coast either directly or via a stream. The options for stormwater management are being investigated separately to solve some of these problems.
Water quality is a significant issue for bathers and beach businesses when beaches are closed in the summer.	Water quality is monitored regularly during summer months to ensure that it is safe to swim.
Consider best way to deal with stormwater on the coast to minimize potential for pollution.	that it is safe to swim.
Maintain and enhance access to the beach, more signage needed.	Encourage people to use public accessways and formed paths instead
Public access is via short west-east lanes off Manly Street. Sand tracks through the scrub covered esplanade reserves are not completely barrier free. There is potential to improve identity of public accesses, as well as the esplanade reserve.	of crossing the dunes wherever they wish. Improved signage indicating public accessways and upgrading of these tracks should encourage their use in preference to unmanaged tracks. Suitable access for vehicles displaying mobility stickers will be
Disability access to the wet sand area of the beach should be provided. Improved access through the dune systems at the northern end of Manly Street to the dry sand is needed for those with limited mobility and pushchairs.	maintained at the Kapiti Boating Club. Sites for limited mobility access will be identified during the accessway review. The area near Olive Terrace has been proposed.

Challenges

Don't allow dunes to be claimed by **gardens**. There are very few areas of native plants in the dunes in Paraparaumu due to escaped garden plants growing there. Residents **dump garden** weeds on the dune areas.

Response

Properties extending gardens, lawns and structures onto the public foreshore will be **encouraged** to cease this activity. If they desire to plant the dunes, to do it as part of a restoration project using native species, with a clear definition between the public foreshore and private property. Garden dumping is **littering** and will be treated as such.





Raumati

Āti Awa ki Whakarongotai

The Raumati coastal character generally comprises largely 1-2 storey wooden houses either older style villas, bungalows or a new quirky style house. They face the beach providing surveillance which makes the beach feel safe. There are viewshafts between the houses and established, though patchy vegetation.

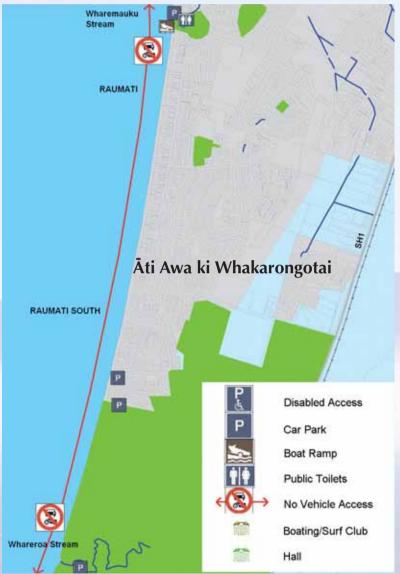
There is an active recreation area, Marine Gardens with Council facilities provided, including a boat ramp and car park.

The Wharemauku Stream which flows through Paraparaumu reaches the coast at Marine Gardens. This stream is home to 12 species of fish. The timber seawall starts along the southern boundary of the stream extending southwards to Queen Elizabeth Park.

Most of the established residential properties abut the beach. The sections are mostly perched on the eroding exposed sand dune which in places is almost cliff like. The houses overlook, and can be said to overshadow the beach in places, causing uncertainty between public and private land particularly where structures such as stairs and gardens connect with the seawall.

There is little public access or public realm between the beach and private properties with the exception of a path on the seawall. Public beach access from Rosetta Road is via short eastwest lanes off Rosetta Road and road access at Matatua Road, Tainui Street and Grove Road. The main accesses are at Marine Gardens and Jeep Road where boat ramps and car parks are available.

The overall strategic response for Raumati is to review access and upgrade where necessary, investigate protection options and protect built character.



Map of Raumati Beach areas

Challenges	Response
The Raumati sea wall starts at the mouth of the Wharemauku Stream (Marine Gardens) and is almost buried in sand at this point. As it proceeds southwards more of the wall becomes exposed and eventually rock toe protection has been added from Aotea Road to Queen Elizabeth Park.	The timber seawall was built following severe erosion in 1976 due to storms. The wall has been effective in preventing further erosion but requires frequent maintenance and is nearing the end of its useful life. Funding for asset renewal has been allowed for. The Council will investigate the most appropriate asset renewal options for the wall as per the hazard section of the strategy.
The Esplanade at Raumati South has a small area of road adjacent to the beach. The top of the seawall is approx 2m above beach level with the road much higher. The cliff face above the seawall is eroding threatening the road and parking alongside is dangerous. This is a popular beach destination where more rubbish bins are needed with more frequent removal of rubbish.	There needs to be a redesign of this area to stabilise the bank and provide good public access to the beach. A concept design will be developed and consultation will be undertaken to develop a design that works for the local community and visitors.
Public access to the beach at Raumati and Raumati South is via east-west lane endings, which are not obvious from the street and have a feel of privacy. Ensure there is not too long a distance between disabled access points.	As part of accessway upgrades , signage will be improved along with trimming vegetation and opening up accessways to the street.
	Where practical one disabled access per settlement will be developed and maintained.
Disability access to the wet sand area of the beach should be provided. Improved pedestrian access at Takitimu Street is needed for those with limited mobility and pushchairs. Walkway on beach (top of seawall) needs to be made so it is comfortable and pleasurable to walk on. eg boardwalk	Suitable access for vehicles displaying mobility stickers will be maintained at the Kapiti Boating Club.
	Sites for limited mobility pedestrian access will be identified during the accessway review.
	The top of the seawall is often overtopped by waves making it unsuitable to form as a walkway with a reliable surface. An alternative secondary seawall will be investigated at The Esplanade (Raumati South) to provide a beach experience above the current wall.
Regular inspections of the coast are needed to record all existing and any new structures.	All public structures including seawalls and steps are regularly checked and maintained to ensure they are safe.

Challenges	Response
Soft options for engineering protection preferred over hard structures.	Soft engineering will always be considered as an option for coastal protection in preference to hard solutions but the most practical and effective solution for the site will be chosen.
Enforcement and signage indicating fines needed, with a particular emphasis on potentially dangerous activities. Queen Elizabeth Park needs to be policed for bikes and vehicles.	The Council will work with Greater Wellington to enforce regulations that currently exist and create signage that is more vandal resistant.
Consultation on building lines need to continue.	Building setback lines will be developed based on the erosion risk but existing lines are adequate protection of amenity.







Paekakariki

Ngāti Haumia, Ngāti Toa Rangatira

There are established residential areas where the private properties abut the beach at the southern end of Paekakariki while most houses are across the road from the beach. The Parade is set approx 2m above beach level and is retained by a sea wall. The road provides a setback as well as public access of the coastline.

The sections are mostly perched on the eroding exposed sand dune which in places is almost cliff like. The houses have differing setbacks from the coastal edge and varying degrees of vegetative cover. There has been significant erosion over the last 70 years resulting in seawalls being built along the foreshore with rock revetment added over time.

In Ames Street houses overlook and can be said to overshadow the beach in places, particularly where structures such as stairs and gardens connect with the seawall.

There is a Surf Life Club at the northern end of The Parade and a large park midway down the road. At the southern end of Queen Elizabeth Park the Wainui Stream reaches the coast. This stream provides the water supply for Paekakariki.

The built environment comprises largely 1-2 storey wooden houses either older style villas, bungalows or a new quirky style house.

The houses have a small footprint and address the beach and therefore the street providing passive surveillance and making the beach feel safe. There are viewshafts between the houses and though established, patchy vegetation.

Overall strategic response for Paekakariki is to protect the unique character of the village, provide education on coastal processes, review and upgrade access where necessary and investigate protection options.



80

Challenges	Response
Along The Parade the seawall is made up of sections of differing material with access and stormwater structures of various forms.	There is the potential to retain or enhance the existing built environment , the scale of the buildings, the streetscapes, activities, seawalls, stormwater, recreation potential, public accesses and planting.
No removal of material / stones from this eroding area.	More signage and enforcement of Bylaws will be used. A brochure could be developed for residents to give to visitors to explain the rules.
Only use soft solutions, ie no more seawalls with policy of replacing them by beach drainage.	Protection solutions for Paekakariki will consider all practical options. However this is a very 'high energy' beach which has been highly modified and soft solutions may not always be practical.
Access to the beach from the road is not barrier free and often involves additional structures ie steps etc from the road down to the seawall and further steps down to the beach. Stairs are visible from beach.	Improved access to the beach is being investigated for seawall areas.
Improved access through the dune systems to the dry sand in Queen Elizabeth Park is needed for those with limited mobility and pushchairs. The gradient on the bridge over Wainui Stream at the southern end of Queen Elizabeth Park is too steep for wheelchairs.	Sites for limited mobility access will be identified during the accessway review. This will involve liaison with Greater Wellington. An area has been proposed just north of the Wainui Stream, reached from the Wellington Road entrance to the park. This will be referred to Greater Wellington for their action.
The landform enhances views from rear houses, Paekakariki houses small street presence with houses overlooking the beach often appearing to be perched on cliff like eroded dunes and highly visible from beach.	Consider the special character of Paekakariki when developing town centre upgrades and character provisions for Paekakariki. Landform with inconsistent setback of buildings is a major component of the existing character.

Glossary

Accelerated erosion means erosion that is caused or accelerated by human activity.

Amenity values mean those natural or physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes.

Assets means anything physical with a defined value including land, structures, buildings, trees.

Āti Awa ki Whakarongotai is a local iwi with rohe (area) boundaries from Kukutauaki (north) to Whareroa (south).

Beach Bylaw refers to the Kapiti Coast Beach Bylaw 2002.

Climate change means a change of climate that is attributed directly or indirectly to human activity, that alters the composition of the global atmosphere and that is in addition to natural climate variability observed over comparable time periods.

Coastal environment means the environment in which the coast is a significant element or part, and includes the coastal marine area.

Coastal margin refers to a subset of the coastal environment generally extending less then 200m inland of the mean high water mark. including all public land adjacent to and including the beach, dunes, estuaries, protection structures and foreshore as well as areas of undeveloped private property, particularly in rural areas.

Coastal marine area means that area of the foreshore and seabed of which the seaward boundary is the outer limits of the territorial sea and of which the landward boundary is the line of mean high water springs, except that where that line crosses a river, the landward boundary at that point shall be whichever is the lesser of:

- i one kilometre upstream from the mouth of the river, or
- ii. the point upstream that is calculated by multiplying the width of the river mouth by five.

Coastal reserve means the publicly owned land identified as esplanade reserves along the coast.

District Plan refers to the Kapiti Coast District Plan and District Planning Maps.

Dune margin means dunes (dry sand areas of the beach) whether vegetated or not, seaward of property boundaries.

Dune restoration means creating a more original dune shape and planting it with indigenous sand binding vegetation. Pingao and Spinifex are the main plants used on the foredune and in some areas a range of backdune natives have also been planted. These have been undertaken in response to erosion problems identified due to loss of vegetation. The restoration planting has been conducted with community participation and has generally included restricting access and educating beachfront owners. Dune vegetation is very fragile and does not survive trampling with feet or vehicles.

Ecological sustainability means a site's ability to continue to exist as an area of indigenous vegetation or habitat for indigenous fauna when taking into account its size, shape, buffering from external effects, connection to other natural areas,

and likely threats. It may change naturally into a different habitat but will remain essentially as indigenous species and of natural character.

Ecosystem means a dynamic complex of plant, animal and micro-organism communities and their non-living environment, interacting as a functional unit.

Esplanade area means an area of land vested as esplanade reserve or esplanade strip along the beachfront.

Esplanade reserve means a reserve within the meaning of the Reserves Act 1977 which is either a local purpose reserve within the meaning of section 23 of that Act, if vested in the territorial authority under section 239, or, a reserve vested in the Crown or regional council, under section 237D; and which is vested in the territorial authority, regional council, or the Crown for the purpose or purposes set out in section 229 of the RMA.

Esplanade strip means a strip of land created by the registration of an instrument in accordance with section 232 for a purpose or purposes set out in section 229 of the RMA.

Estuary means a partially enclosed body of water formed where fresh water from land meets and mixes with salt water from the ocean. These are areas where both ocean and land contribute to a unique ecosystem. The diversity of habitats enclosed in estuaries supports enormous abundance and diversity of species e.g. fish, shellfish, lobsters, marine worms, reeds, seagrasses, mangroves, algae, and phytoplankton. Estuaries are among the most productive environments on earth.

Habitat is the place or type of site where an organism or population normally occurs.

Hapū means subtribe.

Harakeke means flax (Phormium tenax or P. cookianum).

Hikoi means walk.

Hui means an assembly or gathering.

Inanga is (Galaxias attenuatus) a fish, the young stage is referred to as whitebait. The adults of this fish are 4-6 in. long, greenish-yellow in colour, and occur in practically all New Zealand's lowland rivers and streams, belonging to the "native trout" family (Galaxiidae). In autumn they move down stream to estuaries where, during high spring tides, the eggs are laid amongst aquatic vegetation. The eggs hatch when reached by the following spring tide (two weeks later) and the larvae pass out into the sea. It is uncertain whether the young fish return in the spring of the same or the following year; these juveniles are transparent when they enter fresh water, but quickly become pigmented. The juveniles of five of our native fish - banded, giant, and short jawed kokopu, inanga and koaro - are collectively known as 'whitebait'. Most of the whitebait fishery catch is inanga.

Iwi means tribe, people: an iwi authority can refer to any group which legitimately represents Maori tribal interests.

Iwi authority means the authority which represents an iwi.

Iwi Management Plan is a planning document that is recognised by the iwi authority.

Kahawai or mullet is a fish (Arripis Trutta).

Kaimoana means seafood.

Kaitiaki means guardian, steward: the meaning of kaitiaki in practical application may vary between different hapu and iwi.

Kaitiakitanga means the exercise of guardianship and resource management.

Koura means fresh water crayfish.

Lagoon means a type of estuary with a very narrow and ephemeral connection to the sea.

LTCCP means Long Term Council Community Plan, a requirement of the Local Government Act 2002. On the Kapiti Coast this is also called *Kapiti Coast: Choosing Futures - Community Plan*.

Mahinga kai means an established food gathering or fishing area.

Manage means to administer or run something, handle or to maintain or administer and be responsible for its smooth running, to keep control of something especially when wild or unruly, direct, supervise, handle, deal with or control, handle successfully

Mana whenua means customary authority exercised by an iwi or hapu in an identified area.

Mauri means the essential life force of all things.

Natural character means the qualities of the coastal environment that together give the coast of New Zealand recognisable character. These qualities may be ecological, physical, spiritual, cultural or aesthetic in nature, whether modified or managed or not.

Ngāti Haumia is a local hapu (subtribe) of Ngati Toa Rangatira from the Paekakariki area.

Ngāti Raukawa ki te Tonga local iwi with rohe (area) boundaries from Kukutauaki to the north, into Horowhenua District and beyond.

Ngāti Toa Rangatira is a local iwi with rohe (area) boundaries from Whareroa Stream to the south, into Porirua City and beyond.

Para means frost fish or (Lepidopus caudatus).

Paru means dirty or polluted.

Pedestrian means a person walking and/or pushing a pram or wheelchair; pedestrians do not include cycles, horses, land yachts or boat trailers.

Pingao (*Desmoschoenus spiralis*) is a pioneer foredune plant which traps wind blown sand in the frontal dune. It is also valued as a weaving material.

Pipi (*Amphidesma australe*) is a univalve mollusc, a type of shellfish.

Private means land or assets belonging to in individual or company.

Protection in relation to a resource means its maintenance as far as is practicable, in its current state; but includes restoration to a former state or its augmentation, enhancement or expansion.

Public refers to land or assets belonging to central or local government held for the benefit of the whole country.

Rahui means a ban or prohibition on collecting resources; harvest ban. When a rahui is placed on a river, lake, forest, or harbour, people are banned from using some resources. For example, a rahui might ban people gathering shellfish from a beach, for various reasons. Many Māori tribes use the practice of rahui to conserve or replenish a resource. The rahui is observed by Māori and pakeha alike.

Restoration means returning an area to a more natural or original state.

Riparian margin means a strip of land, usually of varying width, adjacent to a waterway and which contributes, or may contribute, to the maintenance and enhancement of the natural functioning, quality and character of the waterway and its margins.

River means a continually or intermittently flowing body of fresh water, and includes a stream; but does not include any artificial watercourse.

Rohe means a territory or boundary which defines the area within which a tāngata whenua group claims traditional association and mana whenua.

Spinifex (*spinifex sericeus*) or sphinx grass is an indigenous sand binding grass adapted to grow through accumulations of wind blown sand.

Sustainable management means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well being and for their health and safety while: sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; safeguarding the life-supporting capacity of air, water, soil, and ecosystems; avoiding, remedying, or mitigating any adverse effects of activities on the environment.







Tāngata kaitiaki are individuals or groups who can authorise customary fishing within their rohe moana, in accordance with tikanga Maori. Their appointments are notified by the tāngata whenua of an area.

Tāngata whenua in relation to a particular area means the iwi, or hapu, that holds mana whenua over that area.

Taonga means treasure, property: taonga are prized and protected as sacred possessions of the tribe. The term carries a deep spiritual meaning and taonga may be things that cannot be seen or touched, examples are language, wāhi tapu, waterways, fishing grounds and mountains.

Taonga raranga means plants which produce material highly prized for use in weaving.

Territorial authority means a city council or a district council.

Tikanga means custom, habit, method.

Tino rangatiratanga means customary authority and control, sovereignty.

Tohemanga (toheroa) (*Amphidesma ventricosum*), is a bivalve mollusc, a type of shellfish.

Trigger point means the agreed time/ stage to take specific known action to address a particular previously identified problem.

Tuatua is a bivalve mollusc, a type of shellfish.

Tuna means eels. These were an important part of the Māori diet. They were caught by hand with a bob or hinaki (eel pot). The bob was a huhu grub or worm attached to a string or flax.

The eels teeth were tangled in the fibres and the eel would then be landed. Camps were set up in favourable spots during the autumn spawning migration. The large number of tuna caught were filleted and dried in the sun.

Tuna heke means eel migration from lakes to sea.

Wāhi tapu means sacred site: these are defined locally by the hapu and iwi which are the kaitiaki for the wāhi tapu. Typically includes burial grounds and sites of historical importance to the tribe. In order to protect particular sites from interference and desecration, some tribes do not disclose the exact location to outsiders.

Water means water in all its physical forms whether flowing or not and whether over or under the ground and includes fresh water, coastal water, and geothermal water but does not include water in any form while in any pipe, tank, or cistern.

Water body means fresh water or geothermal water in a river, lake, stream, pond, wetland, or aquifer, or any part thereof, that is not located within the coastal marine area.

Whenua means land.

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



The Development Management Strategy and Coastal Strategy have been produced after lengthy consultation with the community. They provide high level guidance on the future shape and form of the District and the ways in which the community wants to see the District managed for the future.

They should be read in conjunction with other planning and guidance documents including the District Plan and Best Practice Subdivision Guidelines. They also take cognisance of work on coastal hazards as this is finalised during 2008 and reflect Council's Sustainable Water Use Management Strategy.

