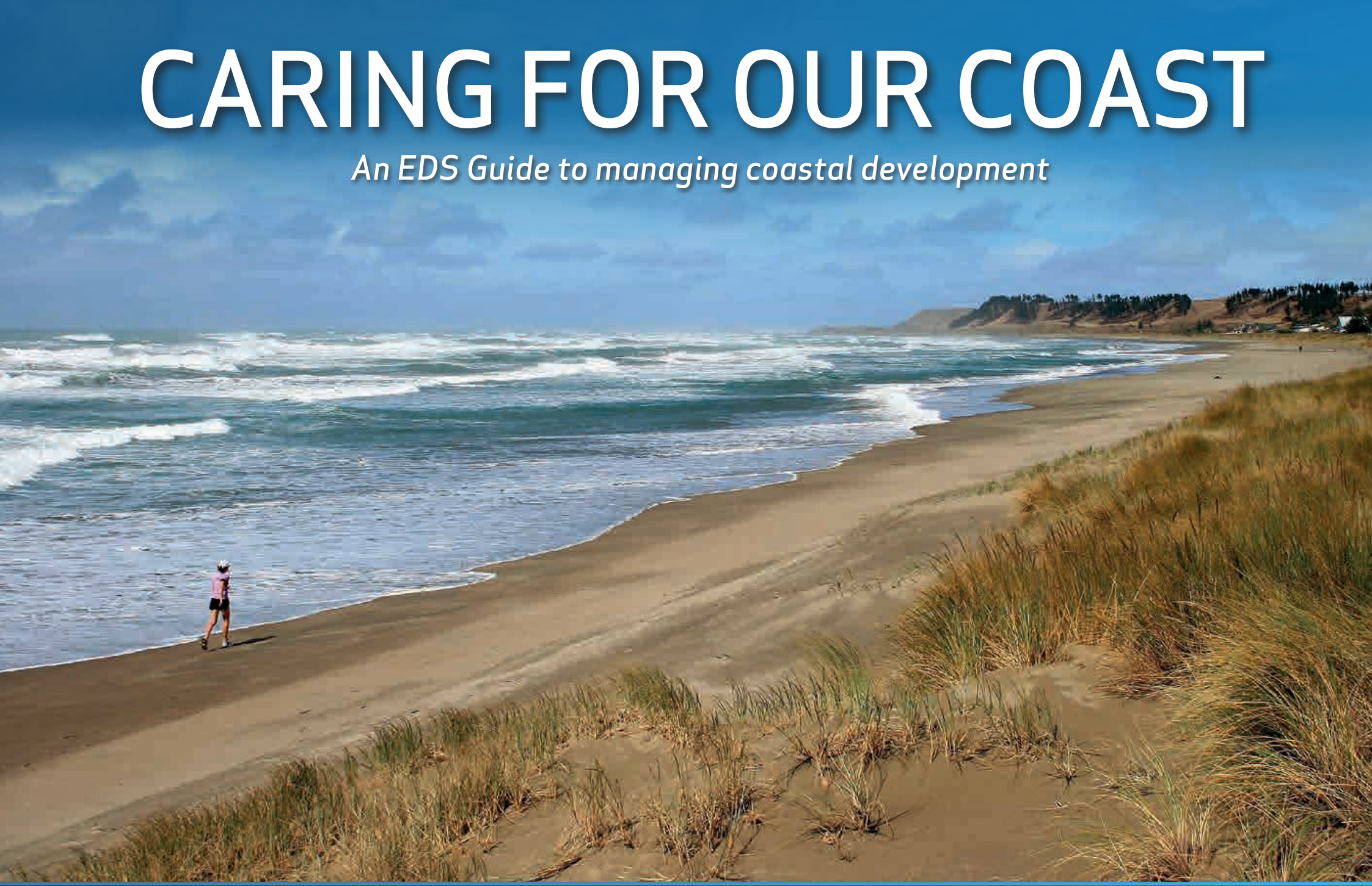
CARING FOR OUR COAST

An EDS Guide to managing coastal development



Lucy Brake and Raewyn Peart

eds
ENVIRONMENTAL DEFENCE SOCIETY

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An EDS Guide to managing coastal development

Lucy Brake and Raewyn Peart

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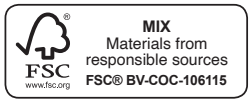

LEADERSHIP ON THE COAST

As a young schoolboy I biked out to the west coast one Sunday morning from my home in Newton Gully and found myself on a wild west coast beach. The experience changed my life. Here I was a kid, growing up in the heart of Auckland city, and only hearing stories of the Waitākere Ranges and the coast beyond. I wanted to see for myself what was there.

The local surf club was celebrating 21 years of lifesaving under the pōhutukawa and I think they took pity on an exhausted schoolboy. The invitation to join the club and to be part of this amazing group of young men, obviously enjoying themselves and somehow being part of a wild landscape, appealed to me greatly. So I accepted their offer not quite knowing what I was getting into.

Let me tell you what I was letting myself in for. It was a lifetime of commitment to that landscape. I am unashamedly in love with the west coast in all its moods, its dangers and its beauty. I have been a lifeguard since that moment, close on 58 years, which is a long time to patrol between the flags. The coast has been my spiritual inspiration, the glue of my life.

I realised that many had come before to appreciate its beauty: painters, poets, writers and those escaping society and sometimes the law. Many had seen through new eyes the beauty of the west coast and had realised that this landscape was precious and needed to be nurtured and cared for.

When my turn came to step in to protect the coast, the job I chose was Mayor of Waitākere City. It seemed to me that to be an advocate and to show leadership was my only option. The creation of the eco city was justification for an enormous sea change in the west.

For 18 years I felt I carried the mantle of those who had gone before, those giants of environmental protection and those that cared and continued the good fight.

The success of the Waitākere Ranges Heritage Act, which was passed by one vote on the floor of the House of Representatives, was a triumph for the west Auckland community and for New Zealand. It acknowledged in law the outstanding values of the west coast and the Ranges. Without the support of John Edgar of the Waitākere Ranges Protection Society and Gary Taylor of the Environmental Defence Society, who brought wisdom and common sense to the table, we would not have succeeded. Both these organisations have had more than two decades of successful negotiations and legal battles, often against enormous odds. I can't thank them enough.

Now in the 21st century, the environmental issues are as important as ever. The threats to the coastal areas, settlements and landscape are real and in no way is the threat any less.

This guide is timely and much needed. It is a credit to those who have given freely of their knowledge and wisdom in setting out the legal status and what is required to maintain the balance between the environment and the needs of New Zealand's coastal development. This is a document of leadership and judgment and I hope it finds an audience that appreciates what we have, how precious it is, and that if lost or destroyed it is gone forever.

Sir Bob Harvey QSO JP
Karekare

PREFACE

New Zealand is an assemblage of islands deep in the South Pacific Ocean. It is a coastal country and we are coastal people. The coast is a big part of our national identity. We are proud of it, and cherish it, and rightly so: our place has some of the best coastlines in the world.

The Environmental Defence Society has a long and proud history of involvement in coastal advocacy, stretching back to the 1970s. Things were simpler then. The challenge was to stop bad development through the courts. And we did that.

The magnificent white sand beach at Karikari, in the Far North, was saved from a gross Surfers Paradise-style outcome, after several court challenges. The coast of the Coromandel Peninsula was a regular battleground as developers sought to convert coastal farms to settlements, with results of varying quality. An aluminium smelter was proposed on the coast at Aramoana, north of Dunedin, threatening a small settlement and important wildlife habitats. The project was withdrawn in the face of widespread opposition.

EDS litigated, won many cases and lost some.

Then came the reforms of the late 1980s that created the Department of Conservation and Ministry for the Environment. In 1991 the Resource Management Act was passed and the concept of sustainable management had legal force in New Zealand. Coastal development became more complicated as we got to grips with the new legal and administrative framework.

In 1994 this new framework led to the New Zealand Coastal Policy Statement, which sought to provide national direction for coastal management. Councils developed new policies and plans for the coast. The idea was to protect wild, undeveloped areas of coastline and to concentrate development in places that had already been compromised. Surveys of coastal landscapes helped identify priority areas for protection.

It sort of worked, but in a limited way. Some of the new plans looked good on paper, others did not, and exceptions were often made.

Around the beginning of the 21st century, a new breed of developers emerged. They had more capital and a personal commitment to doing it right. Consultation and negotiation with interest groups like EDS became the norm, rather than slugging it out in the courts.

Development approvals carried substantial mitigation obligations, like native forest restoration and landscaping. Environmental compensation was often offered rather than extracted. Ridgelines were out of bounds. Mountain Landing and Ōmarino in Northland exemplify the new approach.

A new Coastal Policy Statement emerged in 2010. EDS put a lot of effort into that process. We presented extensive submissions and expert evidence to the Board of Inquiry. The new document provides more direction and certainty than the 1994 version, although case law is still evolving.

When the New Zealand economy has truly recovered from the global financial crisis we can expect a new development push on the coast, so *Caring for our Coast: an EDS Guide to managing coastal development* is timely. It showcases the best and the worst, rural and urban. The Guide distills all of our experience, together with that of the many experts who contributed, into a how to do it well manual for coastal management.

It's pictorial, it's relatively short and it's extremely readable and user-friendly. It charts a better way for the future of New Zealand's coasts. We hope it will make a difference.

Actually, we hope it will make a big difference.

Gary Taylor QSO
Chairman
Environmental Defence Society

Hauraki Gulf

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The final contents of the Guide remain the responsibility of the authors.

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PART ONE

West Coast, Far North District

Waipapa Point, Catlins Coast, Otago

01 INTRODUCTION TO THE COAST

Tongaporutu, Taranaki

IN THIS SECTION...

WHAT IS THE COAST?

The coast is the area where the land and sea meet. This results in a special set of environments where the marine and terrestrial areas influence each other. The term 'coastline' is normally used to refer to the narrow strip around the country where land and coastal waters come into direct contact. The term 'coastal environment' refers to a broader area which is identified in the Resource Management Act 1991 (RMA) as requiring special management, but the term itself is not defined. This issue is discussed further in Chapter 4.

This guide focuses on coastal land where development is occurring. Development of the marine environment is covered in detail by the EDS Guide *Managing the marine environment* available at www.eds.org.nz.

Pakiri Beach, Auckland

PHYSICAL SHAPING OF THE COAST

New Zealand's coast has long, sandy beaches and bays, sheltered estuaries and harbours, exposed rocky headlands, dramatic cliffs, wild dunes and magnificent fiords. The country's climate ranges from the balmy subtropical north to the rugged subantarctic south. Consequently, the coast is home to a diverse range of flora and fauna, including many species that are found nowhere else. The subantarctic islands contain some of the most diverse ecosystems in New Zealand, with much of the flora and fauna being endemic to the region.

Volcanic coastal features

Volcanic activity, stretching back many millions of years, has left spectacular peninsulas, volcanic cones, rock formations and sunken harbours around much of our coast, particularly on the eastern side. The remnants of this ancient volcanic activity can be seen in many of New Zealand's harbours, including those at Whangaroa, Otago and Lyttleton. More recently, the eruption of volcanoes in the Auckland area transformed the coastline, including the creation of the iconic Rangitoto Island.

Tectonic coastal features

The tectonic shaping of the coast is most evident close to the fracture lines which have occurred when the earth's crust has been broken by tectonic forces, known as fault lines. When land moves around these faults causing earthquakes, parts of the coast are uplifted, and others sink. The features of this on-going shifting of the coastline can be seen clearly along the south and south-eastern coasts of the North Island.

Effects of sea-level change

A process which has had a major impact on the coast is sea-level change. New Zealand's most recent ice age occurred around 20,000 years ago, when sea levels dropped to about 125 metres below their present level.[1] As the climate subsequently warmed, and the ice melted, the sea rose and flooded extensive river valley systems and volcanic craters. The Bay of Islands, Hauraki Gulf and Marlborough Sounds are all impressive examples of how mountains, rolling hills and valleys became sheltered harbours and inlets as a result of this sea-level rise. Subsidence, when coupled with sea-level rise, can magnify the changes.

Coastal processes

As the sea level stabilised around 6000 years ago,[2] coastal processes driven by winds, waves and currents began to sculpt the edges of the coastline. Rocks and cliffs were cut back, bays were carved out of soft rock, harbour entrances were straightened with bars and spits, and pieces of the coast were joined together with sand and gravel.

One of the most influential processes in the creation of coastal environments today is the transportation and deposition of sediment. Much sediment arrives at the coast from numerous rivers. White quartz sand washes along the North Island's east coast, black iron-rich sand is deposited along the west coast beaches, and gravel from braided river systems builds up along the east coast of the South Island. Eroding cliffs and offshore continental shelf sediment also provide sources of materials for the coast. Other processes which influence the coastal environment include longshore drift, winds and wave erosion.

These coastal processes can produce and expose some interesting features. Wave-cut platforms can uncover fossils that were embedded in old marine sedimentary rocks millions of years ago, such as those found around Motutapu Island and in the inner Hauraki Gulf. Rare geological features can also be revealed by weathering from wave action, such as the unusual Moeraki Boulders north of Dunedin and the pancake rocks at Punakāiki near Greymouth.

Moeraki Boulders, Otago

TYPES OF ENVIRONMENTS WITHIN THE COASTAL MARGIN

The environment provided by the land-sea interface supports a large number of animal, insect and plant species that are not found further inland. The coast also sustains an unusually wide range of birdlife, with birds acting as important ecological engineers through carrying material across ecosystems. The coast has, however, seen much change in the last thousand years through human activities.

When Māori first arrived in New Zealand, over 800 years ago, most of the coast was covered with forest to the water's edge. Much of this coastal forest was destroyed within 200 years of human settlement, primarily through burning.[3] When European settlers arrived over 500 years later, the destruction of vegetation in the coastal environment accelerated dramatically. In addition to clearing large tracts of coastline, these settlers introduced numerous invasive plant and animal species.

Duneland systems

Dunelands have developed along the coastal margin where sediment has collected and been trapped by vegetation. Between the dunes, where the water table is high, swamps, wetlands and even large coastal lakes can form. The wet sand gives these systems more stability than the surrounding dunes and extensive plant and wildlife communities can become established. Where the hollow between the dunes is free of water, extensive sandy plains can form.

The front face of the foredune is usually the most dynamic part of any dune system, and it is here where most sand is initially trapped, by sand-binding plants. These plants are particularly hardy, as they need to survive the forces of wind, waves and salt spray. Two important sand-binding plants are the endemic primitive sedges pīngao and kōwhangatara.

Backdunes are typically more stable, and if left undisturbed, these dunes can become covered with woody and herbaceous species. In northern areas toetoe grows in damp dune hollows. Eventually these dunes become stabilised and covered with woody shrub and tree species, forming coastal forest.

One of the largest unmodified dune systems can be seen at Mason Bay, on the west coast of Stewart Island, where the dunes back the nineteen kilometre long beach.[4] Nearly complete dune systems also occur on Great Barrier Island and these are associated with intact wetland ecosystems.

Estuaries

Estuaries commonly form when rivers meet the sea. Along sheltered coastlines, estuarine areas provide very ecologically productive environments, where fertile sediment washed from the land is trapped in shallow tidal inlets. New Zealand has around 300 estuarine systems, covering over 100,000 hectares.[5]

Palmers Beach, Great Barrier Island

Ruakaka Estuary, Whangarei District

Estuaries are important habitats and feeding grounds for a range of migratory and wading birds, including the eastern bar-tailed godwit. About 60,000 of these birds visit New Zealand each summer, with large numbers feeding in the Kaipara and Manukau harbours and at Farewell Spit. Oystercatchers, godwits, wrybills, pied stilts, herons and Caspian terns all spend hours searching the mud for invertebrates. The mangrove and saltmarsh habitats in estuaries are commonly inhabited by a range of swamp birds, such as bittern and banded rail.

Estuaries are important spawning and nursery areas for a wide range of fish and shellfish species. Fish such as sand flounder, kahawai and yellow-eyed mullet use estuaries every day. Other fish, such as snapper, red cod and gurnard, enter estuaries seasonally, coming in as juveniles to feed in the rich, sheltered waters and heading back out to sea as adults.[6] Estuaries are also important for a number of native fish that migrate between freshwater systems and salt water, such as adult whitebait or īnanga.[7]

Estuaries are dominated by salt-tolerant plant species. In northern frost-free areas, large mangrove forests can be seen growing in the intertidal zone of shallow muddy inlets. Mangroves are common in the north, but where they are affected by frost, sea rushes tend to replace them in marshy coastal areas. Saltmarsh ribbonwood can form a dense mat just above the high tide mark.

Wetlands

Wetlands are very diverse; they vary in wetness, fertility, acidity and salinity. They are influenced by a range of factors including different landforms, substrates, hydrology and vegetation[8] and cross both coastal and terrestrial environments. The major types of wetlands found in New Zealand's coastal environment include bogs, fens and swamps. Each supports a different community of fauna and flora.

Swamps are much richer in nutrients than bogs and fens, so they can be highly fertile. They benefit from both ground and surface water inflow, carrying nutrients and sediments from adjacent land. A wide variety of plants can be found in swamps including sedges, rushes, reeds, bullrush (raupō), flax and mānuka. A number of coastal forest trees live in swamps including kahikatea, pukatea and cabbage trees. Swamps tend to be found in low lying areas such as coastal plains.

Rocky coasts

New Zealand's rugged and rocky coastline is exposed to energy from ocean swells and salt-laden winds. The shrublands and forests which survive in this harsh environment are made up of a range of species which can tolerate salt and wind like the pōhutukawa.

Pōhutukawa only naturally grow in upper parts of the North Island, north of a line stretching from Gisborne on the east coast to just north of New Plymouth on the west. In southern areas where the climate is cooler and more inhospitable, the southern rātā occupies a similar niche.

Closer to the shoreline smaller species are found, including taupata, karo, pūriri and karaka. Rocky coasts support threatened and rare plants including the nationally critical coastal peppercress and nationally endangered Cook's scurvy grass and New Zealand water cress.[9]

New Zealand has been called the 'seabird capital of the world', with eighty-four species of seabirds breeding in the country, a quarter of the world's total. The rocky coastline provides a critical breeding environment for many of these seabirds. One of the rarest penguins in the world, the yellow-eyed penguin, is found only in New Zealand along the southern east coast of the South Island. The blue penguin, the smallest penguin species in the world, is far more abundant around New Zealand's coastline, particularly along the east coast.

The New Zealand fur seal population, once abundant and now recovering after harvesting by both Māori and European settlers, is estimated to be between 50,000 and 100,000. Seals can be seen along the coastline of the South Island and in some southern North Island areas. Seal 'haul outs', important spots for marine mammals to rest between feeding, include those around the coast of Wellington. The New Zealand sea lion and the southern elephant seal can also be seen around the southern coasts, mainly hauling out on sandy beaches, although the main populations are on the subantarctic islands.

Nugget Point, Catlins Coast, Otago

THE IMPACT OF A CHANGING FUTURE CLIMATE

The impact of climate change will have a significant effect on New Zealand's coastal environments. General warming and extreme warm events are likely to affect coastal ecosystems, particularly estuaries. McGlone and Walker concluded that the greatest short term risk to coastal biodiversity from climate change will come from mitigation measures to protect property and infrastructure, rather than from direct effects.[10] They summarised the predicted impacts as follows:

- Soft shores (beaches and mudflats) are likely to be more severely affected by sea-level rise than hard (rocky) shores
- New areas of estuary and marshland habitat will be created and will replace the inundated areas
- Rising sea levels will probably remove large areas of the rich biological habitat represented by existing coastal dunes, estuaries and marshlands
- The most affected ecosystems will be those typical of dune systems, estuaries and saline, brackish (mixed saline and fresh water) and freshwater lagoons, shallow lakes and marshes. Loss of productive estuarine habitats and biota is likely to accelerate, with the more visible ecological effects being reduced populations and altered migratory patterns of coastal birds, and declines in certain marine fishes
- Warming could extend the potential range of mangroves, but threaten biologically important seagrass meadow habitats

In addition, some of the greatest short-term risks for coastal environments are impacts on infrastructure and property. These are discussed in Chapter 9.

OWNERSHIP OF THE COAST

Following European settlement, the Crown asserted ownership over most of the coastal marine area, which includes the land and water extending from mean high water springs to the edge of the territorial sea (12 nautical miles from shore). Small areas of foreshore and seabed became privately owned as a result of their historical incorporation into land or seabed titles or as a result of the sea eroding away land.

Māori customary rights over the foreshore and seabed are discussed in Chapter 3, including the effect of the Foreshore and Seabed Act 2004 and the Marine and Coastal Area (Takutai Moana) Act 2011. The latter Act introduces the concept of the "common marine and coastal area", encompassing all of the marine and coastal area which is not conservation land, a reserve, national park or privately held. Neither the Crown nor any other person is capable of owning the common marine and coastal area and public access to it is guaranteed.

Much of the landward coastal environment is privately owned. Publicly owned land on the coast includes national and regional parks, esplanade reserves, other reserve areas, railway land and roads. These enable the protection of important natural areas and provision for public access.

Waimarama, Hastings District

WHY IS THE COAST SO SPECIAL?

The coast is where New Zealand was first settled by both Māori and Pākehā. Because of this historical settlement pattern, by far the majority of known archaeological sites are located on the coast, as are many areas of historic and cultural importance.

Most New Zealanders still prefer to live on the coast and it is the location of many of the country's largest urban areas. It also supports much economic activity, with some sectors such as ports and marinas, being dependant on a coastal location.

New Zealanders and visitors to this country highly value the wild and dramatic landscapes which have been formed along the coastline, unobstructed views of the sea, and the ability to access and enjoy beaches and the marine area. The coast plays an important role in the country's quality of life.

The coast provides a unique range of important habitats, including coastal forests, estuaries, dunes and wetlands. These support a huge diversity of indigenous fauna and flora including international migratory wading birds and native spiders.

The coast is extraordinarily important in terms of New Zealand's historical, cultural and natural heritage, quality of life and economy. It is the high value that people place on the coast, and the ability to live, work and play there, which is driving the growing pressure for coastal development. The increasing levels of human activity, are threatening the very special values of the coast that attracted people there in the first place.

Whites Beach and Piha, Auckland

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Near Punakaiki, Buller District

Cable Bay, Far North District

02

COASTAL LAND DEVELOPMENT

IN THIS SECTION...

INTRODUCTION

Many coastal areas within New Zealand are experiencing development pressure. Whilst the 2008 global financial crisis eased this to some degree in the short term, there continues to be increasing numbers of people who are choosing to live or holiday on the coast.

The demand for new houses close to the sea is being met through the redevelopment, intensification or expansion of existing coastal settlements, the establishment of new coastal settlements and rural-residential "lifestyle" development. Each of these types of development has the potential to both positively and negatively impact on the environments within the coastal margin.

Coastal settlement, Far North District

REDEVELOPMENT OF EXISTING COASTAL SETTLEMENTS

In many coastal villages, some which were formerly rural support centres but which have more recently become holiday and retirement communities, buildings largely consisted of baches, cribs or small bungalows. As property prices and living standards have increased, and as building standards have toughened up, modest structures are being replaced by much larger homes. In addition, larger sections are being subdivided into smaller lots and vacant sections are being built on, increasing the overall number of houses within a settlement. In some areas where there is high demand for accommodation, multi-storeyed apartments have appeared close to waterfronts.

Replacement and infill housing, if not carefully designed, can be out of scale with existing buildings and detract from the "sense of place" that current residents associate with the settlement. It can also reduce the natural character, amenity and landscape values of the area, particularly if multi-storey buildings are constructed close to the coastal edge or in prominent locations. If redevelopment is located in known coastal hazard areas, or those potentially at risk over a longer term, this can increase the amount of investment at risk and strengthen demands for hard coastal protection works.

Intensification of development can overload existing infrastructure, particularly sewage treatment facilities, leading to pollution of rivers and coastal waters. Poorly managed earthworks can generate sediment. Stormwater runoff can increase, as a result of an expansion of hard surfaces, resulting in greater volumes of sediment and other contaminants entering rivers and the marine area. Existing residents can face rapidly increasing rates bills to fund the upgrading of the infrastructure required to accommodate growth.

Bayly's Beach, Kaipara District

If undertaken sensitively, however, redevelopment of existing settlements can keep development within established urban areas. This provides opportunities to help direct development away from undeveloped areas of the coast, while retaining and enhancing the individual character of a community. It can also help settlements adapt more successfully to the future effects of climate change, if redevelopment and associated infrastructure is located away from areas vulnerable to coastal hazards. In addition, it is possible to make more efficient use of existing infrastructure such as roading, sewage and stormwater networks.

EXPANSION OF COASTAL SETTLEMENTS

In many parts of New Zealand, urban areas on the coast are expanding to accommodate growing populations. There is a strong demand for sea views and proximity to beaches, which can result in houses extending along the coast and into the hills surrounding coastal settlements.

If poorly managed, the expansion of coastal settlements may have significant negative impacts on the coastal environment. Incremental, lot-by-lot subdivision can result in ribbon development stretching along the coastal edge. Buildings extending onto ridges and headlands detract from the natural setting which frames existing coastal settlements.

Increased levels of urban development in catchments draining into the sea have the potential to reduce water quality and degrade marine ecosystems, as the quantity of sedimentation and stormwater runoff increases. Development can also degrade or destroy historical and cultural sites if these are not adequately protected.

Expanding the location of houses into low-lying areas close to the coastal edge can result in an increased risk from coastal hazards such as erosion, flooding and tsunamis. Owners of threatened properties may demand that structures, such as seawalls and groynes, be built to protect their properties as beaches erode and dunes migrate inshore. This problem can be made much worse if coastal vegetation is removed and dunes lowered to improve views.

While the number of houses in coastal settlements may be increasing, this does not always result in a growth in the resident population. Many coastal houses are used as holiday homes, and are only occupied infrequently, with the owners primarily living elsewhere. Retirees moving into a coastal settlement to live may eventually move out again, as their health deteriorates and they require better access to medical services. Existing residents hoping for better services, from growth of their coastal settlements, may be disappointed when new houses are only used seasonally.

On the positive side, providing more opportunities for people to live on the coast by expanding areas already developed, can help protect undeveloped coastal areas. It can also increase the amount of legal public access to the coast where esplanade reserves or strips are provided on subdivision. If well-designed to fit within the landscape, and if contained within clearly defined urban boundaries, such development can create additional coastal living opportunities for New Zealanders while helping to retain the special values of the coast.

Snells Beach, Auckland

ESTABLISHMENT OF NEW COASTAL SETTLEMENTS

As more and more people choose to live or holiday next to the coast, provision is being made for the establishment of new coastal villages and towns. Coastal settlements that develop haphazardly, or which are poorly designed, can substantially reduce the natural character of the coastal environment. Removal of indigenous vegetation will change the natural features and natural protection of the coastal edge. Locating buildings on sensitive areas, such as the coastal margin, ridges and headlands, can significantly alter the natural character and landscape setting. The construction of buildings that are not in scale with the surrounding environment may have considerable impacts on the natural coastal values.

If new coastal settlements are situated in the right location they can provide for additional coastal houses in well-planned and contained areas. This helps to avoid urban sprawl and ribbon development which may occur if existing settlements are allowed to continually expand. New settlements provide the opportunity to plan for and design state-of-the-art townships that have a coherent style and character. If these kinds of new communities are designed sensitively, they offer an opportunity to provide a good balance between public and private spaces, to incorporate sustainable design features (such as water and energy efficiency) and green infrastructure, and to ensure protection of the surrounding natural environment.

Omaha, Auckland

RURAL-RESIDENTIAL COASTAL DEVELOPMENT

Many coastal farms are being subdivided into rural-residential developments to accommodate the growing demand for "lifestyle living" outside established urban areas. New sections may be several hectares or more in size and have large houses and associated structures built on them. Houses are often located to maximise coastal views and therefore are built high up on headlands and ridges, or close to coastal cliffs and beaches. The land surrounding the houses may be used for a variety of uses including intensive horticulture, hobby farming or reinstatement of indigenous vegetation.

If poorly located and designed, lifestyle development can detract from the natural and wild character of the coast. This is particularly the case if buildings are intrusive through being located on sensitive areas such as headlands and ridgelines and if reflective materials are used in construction. The cumulative effect of buildings dotted throughout the landscape can urbanise what was once a rural landscape.

Where only part of a farm is subdivided, the remaining smaller farm may not be economic, which could ultimately lead to a desire by the landowner to further subdivide the farm into lifestyle lots.

Where farmland that has been degraded through unsustainable farming practices is developed for lifestyle living, there may be an opportunity to restore the land. This can be achieved through the protection of important habitats such as wetlands, riparian margins and dunelands. Excluding stock from remnant native vegetation will allow seedlings to survive and regeneration to take place.

Replanting with indigenous species, and the ongoing control of weeds and animal pests, will contribute towards restoration of the natural character of the property. Provision can be made for formal public access in areas where no or only informal access was previously available. Such opportunities need to be carefully identified and planned for, in order to ensure that a substantial net benefit to the environment is achieved.

Bream Tail, Kaipara District

CANAL ESTATES

Canal estates are developments where a network of waterways is artificially created through the excavation of land adjacent to the sea and the construction of seawalls. The surrounding land may be elevated by adding fill material. The area is then subdivided, with many properties having boundaries directly bordering onto the canals. The waterfront properties may be provided with floating pontoons where boats can be moored.

Such developments artificially extend the length of the coastal edge and therefore increase the number of waterfront properties which can be provided in a given area. They also increase the size of the marine area, potentially creating new habitat for marine creatures. However, the additional coastline which is created usually consists of unnaturally hard and straight edges which do not resemble natural coastline.

Canal estates can result in the destruction of natural features, particularly wetlands and estuarine areas. If not designed and managed properly, they can lead to increased stormwater runoff and sedimentation entering the marine area. In addition, bottom-dwelling marine life may be disturbed during both construction and maintenance dredging of the canals and access channels. Such dredging can also lead to the suspension of sediment in the water column and may impact on other sites if the dredged material is disposed of at sea. Canal developments may reduce public access along the coastal edge, as the canal entrance often creates an impassable barrier for pedestrians, and frequently the canal edges are incorporated into the adjacent properties. These kinds of developments can be particularly vulnerable to changes in sea level.

One of the benefits of such developments is that they can draw development pressure away from more sensitive areas of the coastal environment and reduce the expansion of existing coastal settlements into more natural areas. If well-designed, with ample provision for public spaces and walkways along the coastal edge as well as public pontoons and jetties, such developments have the potential to increase public access to and enjoyment of the coast.

Marsden Cove, Whangarei District

SUMMARY OF IMPACTS FROM DIFFERENT COASTAL LAND DEVELOPMENT MODELS IN NEW ZEALAND

Figure 2.1 Summary of impacts from coastal development models

Development model	Potential negative effects from inappropriate development	Potential gains from sensitive development
Redevelopment of existing coastal settlements	✗ Reduces natural character and landscape values ✗ Detracts from "sense of place" ✗ Overloads existing infrastructure ✗ Increases sediment and pollutant flows into rivers and the marine area ✗ Increases risk from natural hazards ✗ Increases demand for hard protection structures ✗ Increases rates bills	✓ Contains development within existing areas ✓ Keeps development away from undeveloped areas of coastline ✓ Retains individual character of settlements ✓ Promotes efficient use of existing infrastructure ✓ Enables communities to better adapt to future impacts of climate change
Expansion of coastal settlements	✗ Reduces natural character and landscape values ✗ Increases threats to biodiversity from weeds and pests ✗ Results in ribbon development along the coast ✗ Detracts from the natural setting ✗ Increases sediment and pollutant flows into rivers and the marine area ✗ Degrades or destroys historical or cultural sites ✗ Increases risk from natural hazards ✗ Increases demand for hard protection structures ✗ Changes population structure	✓ Contains development within existing locations ✓ Keeps development away from undeveloped areas of coastline ✓ Retains special values of the coast if done sensitively ✓ Increases public access to the coast
Establishment of new coastal settlements	✗ Reduces natural character and landscape values ✗ Results in sporadic and ribbon development along the coast ✗ Increases threats to biodiversity from weeds and pests ✗ Degrades and destroys historical and cultural sites ✗ Increases sediment and pollutant flows into rivers and the marine area ✗ Increases risk from natural hazards ✗ Increases demand for hard protection structures	✓ Avoids urban sprawl and ribbon development ✓ Provides coherent and appropriate building style ✓ Offers good balance between public and private spaces ✓ Presents a chance to incorporate sustainable design and green infrastructure ✓ Increases public access to the coast
Rural-residential coastal development	✗ Detracts from the natural character and landscape values ✗ Results in houses dotted throughout the coastal landscape ✗ Creates cumulative effect of an urbanised rural landscape ✗ Reduces or excludes public access to the coast ✗ Degrades and destroys historical and cultural sites ✗ Increases threats to biodiversity from weeds and pests	✓ Protects important habitats ✓ Restores areas of native vegetation ✓ Restores natural systems such as wetlands and dunelands ✓ Enhances public access to the coast
Canal estates	✗ Destroys natural coastal habitats and features ✗ Changes coastal processes ✗ Increases stormwater runoff and sedimentation ✗ Reduces quantity and quality of marine life ✗ Disturbs bottom-dwelling marine life ✗ Degrades and destroys historical and cultural sites ✗ Increases risk from natural hazards ✗ Reduces public access along the coastline ✗ Increases threats to biodiversity from weeds and pests	✓ Contains development within existing areas ✓ Draws development pressure away from more sensitive areas ✓ Creates new marine habitat ✓ Enhances public access to the coast

Pauanui, Thames-Coromandel District

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Islington Bay, Rangitoto Island, Hauraki Gulf

03 COASTAL MANAGEMENT

Maraetai, Auckland

IN THIS SECTION...

INTRODUCTION

New Zealand's coastal environment is primarily managed under the Resource Management Act 1991 (RMA). This legislation establishes which statutory authorities are responsible for various aspects of coastal management, a set of principles which those authorities must apply, and a range of mandatory and optional tools which can be employed to achieve the purpose of the RMA. There are also several other Acts which are relevant to management of the coastal environment, including the Marine and Coastal Area (Takutai Moana) Act 2011, Local Government Act 2002 and Fisheries Act 1996.

Otehei Bay, Urupukapuka Island, Bay of Islands

COASTAL MANAGERS

The Minister of Conservation, Department of Conservation, Minister and Ministry for the Environment, regional councils, territorial authorities and iwi all have specific roles in the management of New Zealand's coastal environment as shown below, most of which are provided for under the RMA.

Figure 3.1 Coastal management responsibilities

Agency	Responsibility
Minister of Conservation	New Zealand Coastal Policy Statement (mandatory) Approval of Regional Coastal Plans Assessment of proposals of national significance relating to the coastal marine area Coastal tendering
Department of Conservation	Supports the Minister of Conservation's RMA coastal role Advocate for the conservation of natural and historic resources within the coastal marine area
Minister and Ministry for the Environment	National Policy Statements (other than the NZCPS) National Environmental Standards Assessment of proposals of national significance outside the coastal marine area State of the environment reporting
Regional Councils	Regional Policy Statement (mandatory) Regional Coastal Plan (mandatory) Other Regional Plans (optional) Resource consenting Monitoring and enforcement
Territorial authorities	District Plan (mandatory) Resource consenting Monitoring and enforcement
Iwi Authorities/Holders of Customary Marine Title under the Marine and Coastal Area (Takutai Moana) Act 2011	Planning Documents (optional) Joint Management Agreement (if entered into with local authority)

Minister and Department of Conservation

The Minister of Conservation provides national oversight of the management of the coast. The Minister is required to prepare a New Zealand Coastal Policy Statement (NZCPS) to state objectives and policies to promote the sustainable management of the natural and physical resources of the coastal environment. The NZCPS guides local authorities in their day-to-day management of the coastal environment and gives direction on the content of regional policy statements and regional and district planning instruments. This is how the NZCPS "guides" local authorities in their management of the coast.

The Minister of Conservation is required to approve regional coastal plans prepared by regional councils and may require councils to make amendments to such plans.[1] These plans apply to the coastal marine area which is defined in the RMA as consisting of the foreshore, seabed and coastal water and the air space above the water. The seaward boundary is the outer limits of the territorial sea and the landward boundary is the line of mean high water springs, except where it crosses a river. In that case the line is calculated as being the lesser of either one kilometre upstream from the river mouth or the point where the width of the river mouth is multiplied by five.[2] Some regional councils mark these river and coastal marine area boundaries in their regional coastal plan.

The Minister of Conservation previously had a role in making decisions on applications for coastal permits for restricted coastal activities. However this was removed in the 2009 amendments to the RMA. The operative NZCPS 2010 does not require any activity to be specified as a restricted coastal activity in a regional coastal plan (Policy 29).

The Minister now has a role in relation to proposals of national significance which relate to the coastal marine area.[3] The Minister of Conservation solely (or in conjunction with the Minister for the Environment for proposals relating partly to the coastal marine area) may "call in" a proposal of national significance and refer it to a Board of Inquiry or the Environment Court for a decision.[4]

As well as supporting its Minister, the Department of Conservation may lodge submissions under the RMA on proposed policy statements, proposed plans and plan changes, and resource consent applications. This is as part of its advocacy role, set out in section 6 of the Conservation Act 1987, where it states that the functions of the Department include "to advocate the conservation of natural and historic resources generally". "Natural resources" has a wide definition in the Act and includes plants, animals, ecosystems, geological features and landscapes.[5] This means that the Department has an advocacy role for the conservation of biodiversity, historic heritage and natural landscapes including those within the coastal environment.

Minister and Ministry for the Environment

The Minister for the Environment has a broad role under the RMA and many of the Minister's functions affect the coastal environment. The Minister initiates and recommends the adoption of national policy statements (other than the NZCPS) and national environmental standards which may impact on the coastal environment. For

example, the National Policy Statement for Freshwater Management applies to freshwater bodies in the coastal environment.

The Minister for the Environment may "call in" a proposal of national significance (outside the coastal marine area) and refer it to a Board of Inquiry or the Environment Court for a decision. The Ministry for the Environment supports the Minister's RMA functions and undertakes state of the environment reporting which includes the coastal environment. The last full national-level report on the state of New Zealand's environment was produced in 2007.[6] The Ministry has developed a set of indicators which take the "pulse of the physical well-being" of land, water, air, plants and animals. Regular web-based environmental report cards are produced on these indicators which identify trends in, and selected pressures on, natural resources.[7]

Regional councils

Regional councils play an important role in the management of the coastal environment, including through the management of land, air and water, which often affects the coastal environment. Their overall role is to "establish, implement and review objectives, policies and methods to achieve integrated management of the natural and physical resources of the region".[8] There are six unitary councils in New Zealand, which are territorial authorities with regional council responsibilities.

Regional councils are required to prepare objectives and policies in relation to any actual or potential effects of the use, development, or protection of land which are regionally significant.[9] They are responsible for a wide range of functions including managing impacts on freshwater bodies, soils, air, biodiversity and natural hazards.[10] They also manage most activities within the coastal marine area including reclamation, dredging and the erection of structures for activities such as aquaculture, ports, marinas and boat moorings.

Regional councils fulfil these roles largely through preparing a regional policy statement (which sets the policy framework for district and regional plans), a regional coastal plan and other regional plans, as well as through making decisions on resource consent applications. Plans may contain water quality classifications and allocate space for particular activities. Decisions taken about upstream activities will impact on the coast, such as those on land use intensification and discharges into water. Regional councils can also use a range of non-statutory mechanisms to achieve the sustainable management of the coastal environment such as through providing financial incentives, grants, education, advocacy and coordination of volunteer groups.

Regional councils have a role in deciding applications for water permits to authorise the taking of water, discharge permits to authorise the discharge of water and contaminants and coastal permits to authorise activities undertaken within the coastal marine area. The granting of these consents can have significant consequences for the coastal environment through changing sediment flows from rivers to the coast, allowing contaminants to be discharged into the coastal environment and permitting bio-physical changes to the marine environment.

Not all resource consents received by a regional council will be notified to allow for public submissions; the thresholds for notification will be specified in the relevant regional plan.

Regional councils have important monitoring functions and capabilities in the coastal environment. They are also primarily responsible for abandoned structures in the coastal marine area through the Marine and Coastal Area (Takutai Moana) Act 2011.

Territorial authorities

Territorial authorities (district and city councils) are responsible for the area located landward of the coastal marine area (above mean high water springs). They are required to control the effects of the use, development or protection of land for a range of purposes.[11]

The main mechanisms through which territorial authorities fulfil this role is the preparation of district plans, the processing of resource consent applications and the enforcement of compliance with district plan provisions. They may also use a range of non-statutory mechanisms.

Territorial authorities are responsible for processing applications for subdivision and land use consents. The district plan establishes the objectives, policies and rules which apply to these activities and determines whether consent is required, and if so, what will be considered when determining applications. Land use consent may be required for building structures, demolishing structures, excavation, vegetation removal and deposition of substances. Subdivision and land use activities cause many of the most significant impacts on the coastal environment meaning territorial authorities have a very important role to play in management of this area.

Not all resource consents received by a district or city council will be notified; the thresholds for notification will be specified in the relevant district plan.

Some territorial authorities have extended their jurisdictional boundary to mean low water springs. These extensions apply only to functions and responsibilities under the Local Government Act 2002 and enable bylaw powers to manage vehicle and other effects of activities on beaches.

Iwi authorities and groups holding customary marine title

Under the RMA, iwi authorities may prepare iwi planning documents to address coastal management issues. The RMA is silent on how iwi planning documents are to be prepared, or what they might contain, and as a result they come in a variety of shapes and forms. Councils must take into account any relevant planning document recognised by an iwi authority and lodged with the council, when preparing a RMA planning document, but only to the extent that its content has a bearing on resource management issues of the region or district.[12] The Government is currently proposing amendments to the RMA that seek to improve Māori participation in resource management.

Any group which has obtained customary marine title under the Marine and Coastal Area (Takutai Moana) Act 2011 has the right to create a planning document setting out issues, objectives and policies for the management of the area. Once lodged, the document must be taken into account by decision-makers.

A local authority and an iwi authority (or other group representing hapū) may prepare a joint management agreement which allows for the joint performance or exercise of any function, power or duty of a regional or territorial authority. Any party to a joint management agreement may terminate the agreement by giving the other party 20 working days' notice. A number of joint management arrangements between iwi groups and local authorities have been reached outside the RMA framework as the result of Treaty settlements or voluntary agreement.

Waiapu Estuary, East Cape

STATUTORY PRINCIPLES

Statutory principles applying to coastal management are set out in Part II of the RMA, as well as in the Hauraki Gulf Marine Park Act 2000 (and these apply only to the Hauraki Gulf and catchments). The Marine and Coastal Area (Takutai Moana) Act 2011 also sets out statutory rights and interests in relation to the common marine and coastal area.

Resource Management Act 1991

Part II of the RMA sets out the purpose of the Act and principles which are to be applied to resource management. These include matters of national and lesser importance. Section 8 of the RMA is also a key part of coastal management.

The overriding purpose of the RMA is to "promote the sustainable management of natural and physical resources". This is defined in section 5 (2) as meaning:

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

Even if a proposed development on coastal land fails to meet one or more of the requirements of subsections (a) to (c) above, it may still constitute sustainable management, particularly if it generates substantial positive benefits. These include benefits to the economy, cultural values and the local community.

Of particular significance to the management of coastal development is section 6(a) which identifies as a matter of national importance:

> The preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use and development.

Despite the reference to the "coastal environment" in section 6(a) this term is not defined in the RMA. A discussion on the definition of "coastal environment" is provided in Chapter 4.

The RMA identifies six other matters of national importance which are relevant to the management of coastal development. These are:

- The protection of outstanding natural features and landscapes from inappropriate subdivision, use and development
- The protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna
- The maintenance and enhancement of public access to and along the coastal marine area, lakes and rivers
- The relationship of Māori and their culture and traditions with their ancestral lands, water, sites, wāhi tapu, and other taonga
- The protection of historic heritage from inappropriate subdivision, use and development
- The protection of recognised customary activities

All persons exercising functions and powers under the RMA, such as councils when making decisions on their policies and plans or on resource consent applications, are required to recognise and provide for these matters of national importance including preservation of the natural character of the coastal environment. The word "protection", which is used in many of the matters of national importance, is not defined in the RMA. The High Court has held that 'protection' means to guard against, or take care of.[13]

Part II of the RMA also sets out "other matters" which decision makers must have "regard to" and these include those of particular relevance to coastal development:

- Kaitiakitanga[14]
- The ethic of stewardship[15]
- The maintenance and enhancement of amenity values[16]
- The intrinsic value of ecosystems[17]
- The maintenance and enhancement of the quality of the environment[18]
- Any finite characteristics of natural and physical resources[19]

Other matters in section 7 may also have particular relevance to coastal development, including the efficient use and development of natural and physical resources, the effects of climate change and the benefits to be derived from the use and development of renewable energy.

These matters of national importance and other matters are subject to the overriding purpose of the

RMA which is to promote the sustainable management of natural and physical resources. As a result, the natural character of the coastal environment, and other matters of national importance, may not always be protected under the RMA.

All provisions in policy statements, RMA plans and resource consent applications are to be assessed against the matters contained in Part II of the RMA. The practical application of these principles to coastal development is described in Parts Two and Three of this Guide.

At the time of writing, some reforms to the structure and content of sections 6 and 7 of the RMA had been proposed by government. These are unlikely, however, to change the overall thrust which underscores the importance of protecting important values attached to the coast.

New Zealand Coastal Policy Statement 2010

The RMA requires the Minister of Conservation to prepare a NZCPS to "state policies in order to achieve the purpose of this Act in relation to the coastal environment of New Zealand".[20] Essentially this means that the purpose of the NZCPS is to achieve sustainable management of the natural and physical resources of New Zealand's coastal environment. This is accomplished through the requirement that local authorities must give effect to the NZCPS in planning documents. They must also have regard to the NZCPS when considering consent applications. In this way, the NZCPS was intended to integrate all RMA decision-making affecting the coastal environment.

The NZCPS is the only mandatory national policy statement required under the RMA. The first NZCPS was issued in 1994. A new NZCPS took effect on 3 December 2010. This document is set out fully in Appendix One of this Guide and the application of its policies is discussed in more detail throughout the rest of the Guide.

Hauraki Gulf Marine Park Act 2000

The Hauraki Gulf Marine Park Act applies to the Hauraki Gulf, its islands and its catchments. The relevant sections are set out fully in Appendix Two of this Guide. Section 7 (recognition of the national significance of the Hauraki Gulf) and section 8 (management objectives) must be treated as a national policy statement and a NZCPS.[21] Regional policy statements, regional plans and district plans which apply to the Hauraki Gulf and its islands and catchments must give effect to these sections. In addition, consent authorities must have regard to sections 7 and 8 when considering an application for resource consent within the Hauraki Gulf area. Where there is conflict between sections 7 and 8 of the Hauraki Gulf Marine Park Act and the NZCPS 2010, the latter prevails.

The management objectives of the Hauraki Gulf Marine Park Act seek to promote the protection and, where appropriate, enhancement of:

- The life-supporting capacity of the environment
- The Gulf's natural, historic and physical resources
- Resources of the Gulf with which tangata whenua have an historic, traditional, cultural and spiritual relationship
- The cultural and historic associations that people and communities have with the Gulf's resources
- The contribution of the Gulf's resources to the social and economic wellbeing of the people and communities of the Gulf and New Zealand
- The resources of the Gulf which contribute to the recreation and enjoyment of the Gulf for people and communities of the Gulf and New Zealand

These objectives cover the natural, historic and physical resources of the Hauraki Gulf, its islands and catchments and therefore have much significance for the management of coastal land in addition to the marine area.

As well as setting out management objectives, the Hauraki Gulf Marine Park Act established a Hauraki Gulf Marine Park which primarily consists of reserve land, common marine and coastal area within the Hauraki Gulf (other than foreshore or seabed held for defence purposes) and seawater (but not marine life).

The Act also established the Hauraki Gulf Forum for the purpose of integrating management of, and promoting the conservation and sustainable management of, the Hauraki Gulf; facilitating communication, cooperation and coordination; and recognising the relationship of tangata whenua with the Hauraki Gulf.

Marine and Coastal Area (Takutai Moana) Act 2011

In 2003, the Court of Appeal found that Māori customary rights to the foreshore and seabed had not been extinguished and the Māori Land Court had jurisdiction to conduct investigations into the title of the foreshore and seabed.[22]

The Crown's response was the enactment of the Foreshore and Seabed Act 2004. This reflected Government concerns that the great majority of New Zealanders understood that the foreshore and seabed was owned by the Crown on behalf of all New Zealanders. The Foreshore and Seabed Act vested ownership of the foreshore and seabed, except for

STATUTORY PRINCIPLES (continued)

those areas already in freehold title, in the Crown, while providing limited recognition of customary title through customary rights orders and territorial customary rights orders.

In its report on the Crown's foreshore and seabed policy (known as Wai 1071), the Waitangi Tribunal found that the policy underpinning the Foreshore and Seabed Act was in breach of the Treaty of Waitangi and failed in terms of wider norms of domestic and international law including the rule of law and the principles of fairness and non-discrimination against a particular group of people. Criticism was also voiced by the United Nations Commission on Human Rights which recommended that the Foreshore and Seabed Act be repealed.[23]

In response to the ongoing debate, a review was conducted, which led to the enactment of the Marine and Coastal Area (Takutai Moana) Act 2011. This established a new regime for the recognition of customary rights and title over the common marine and coastal area. Its implications are discussed further in Chapter 11.

Kaiaua, Firth of Thames

The new legislation defines a "common marine and coastal area" which includes the marine and coastal area, excluding existing freehold title and areas owned by the Crown as conservation areas, national parks or reserves. It states that the common marine and coastal area has a "special status" and that neither the Crown nor any other person owns, or is capable of owning it.[24] Every person has the right to enter, pass over, and engage in recreational activities in the common marine and coastal area.[25]

Under the Marine and Coastal Area (Takutai Moana) Act "marine and coastal area":

(a) means the area that is bounded,—

  (i) on the landward side, by the line of mean high-water springs; and

  (ii) on the seaward side, by the outer limits of the territorial sea; and

(b) includes the beds of rivers that are part of the coastal marine area (within the meaning of the Resource Management Act 1991); and

(c) includes the airspace above, and the water space (but not the water) above, the areas described in paragraphs (a) and (b); and

(d) includes the subsoil, bedrock, and other matter under the areas described in paragraphs (a) and (b)

Any claims to the common marine and coastal area, made before the commencement of the Act, are to be transferred to the High Court whose jurisdiction to consider such claims is codified in the legislation. The Act also provides for recognition of customary rights through:

- Protected customary rights – a right that has been exercised since 1840 and continues to be exercised in accordance with tikanga by the applicant group and is not extinguished as a matter of law[26]
- Customary marine title – where the applicant group holds the specific area in accordance with tikanga, and has exclusively used and occupied it from 1840 to the present day without substantial interruption, or received it after 1840 through a customary transfer

The implications of these rights for coastal management include:

- The holders of customary marine title have greater rights of participation in plan-making and the protection of protected customary rights is a matter of national importance that must be recognised and provided for in plan-making
- There are additional rights associated with notification. Local authorities are required to assess whether protected customary rights groups or customary marine title groups will be affected by a resource consent application, and give limited notification to groups where they are affected
- There are financial implications as no coastal occupation charge may be imposed on a protected customary rights group or customary marine title group
- The local authority is required to monitor the exercise of protected customary rights in its region
- There are limitations on other activities occurring in protected customary rights or customary marine title areas

COASTAL MANAGEMENT TOOLS

The coastal environment is primarily managed through developing planning documents, considering applications for resource consents and applying a range of non-statutory mechanisms.

Resource Management Act policy statements and plans

Regional policy statements, regional plans and district plans are prepared under the RMA to guide and control activities in the coastal environment.

Regional councils are required to prepare a regional policy statement and a regional coastal plan which applies to the coastal marine area (below mean high water springs). Regional councils are able to prepare regional coastal environment plans which apply to the entire coastal environment, including land above mean high water springs, and this can assist in integrating management of the coastal environment. The RMA specifically states that a regional plan may include a coastal plan.[27] Such plans typically contain objectives and policies which apply to the entire coastal environment. However their rules often only apply to the coastal marine area, leaving territorial authorities to control land use in the coastal environment through provisions in district plans.

Territorial authorities are required to prepare a district plan which applies to land above mean high water springs. District plans contain objectives and policies, as well as rules controlling activities such as land use, subdivision and noise. The rules contained in district plans are central to the management of the coast, because land development cumulatively has the greatest impact on the coastal environment. Some district plans identify special coastal zones, where greater control is exercised over development, in recognition of the sensitivity of the coastal environment.

Resource consents

Many activities require a resource consent before they can proceed. Regional and district plans largely determine whether an activity will require consent and whether that consent will be notified. When the council is determining whether or not to grant the resource consent application it will consider:

- The purpose and principles of the RMA
- The provisions of the NZCPS 2010, other national policy statements, and any relevant environmental standards or other regulations
- The relevant provisions in the applicable regional policy statement, regional plan and district plan
- The actual and potential effects on the environment of allowing the activity
- Any other matter that is relevant and reasonably necessary to determine the application

If the council decides to grant a consent, it may impose a range of conditions to manage environmental effects, and may ensure the performance of conditions through requiring covenants or bonds. More detailed information on the processing of resource consent applications and making submissions can be found at www.rmaguide.org.nz.

Westpark Marina, Auckland

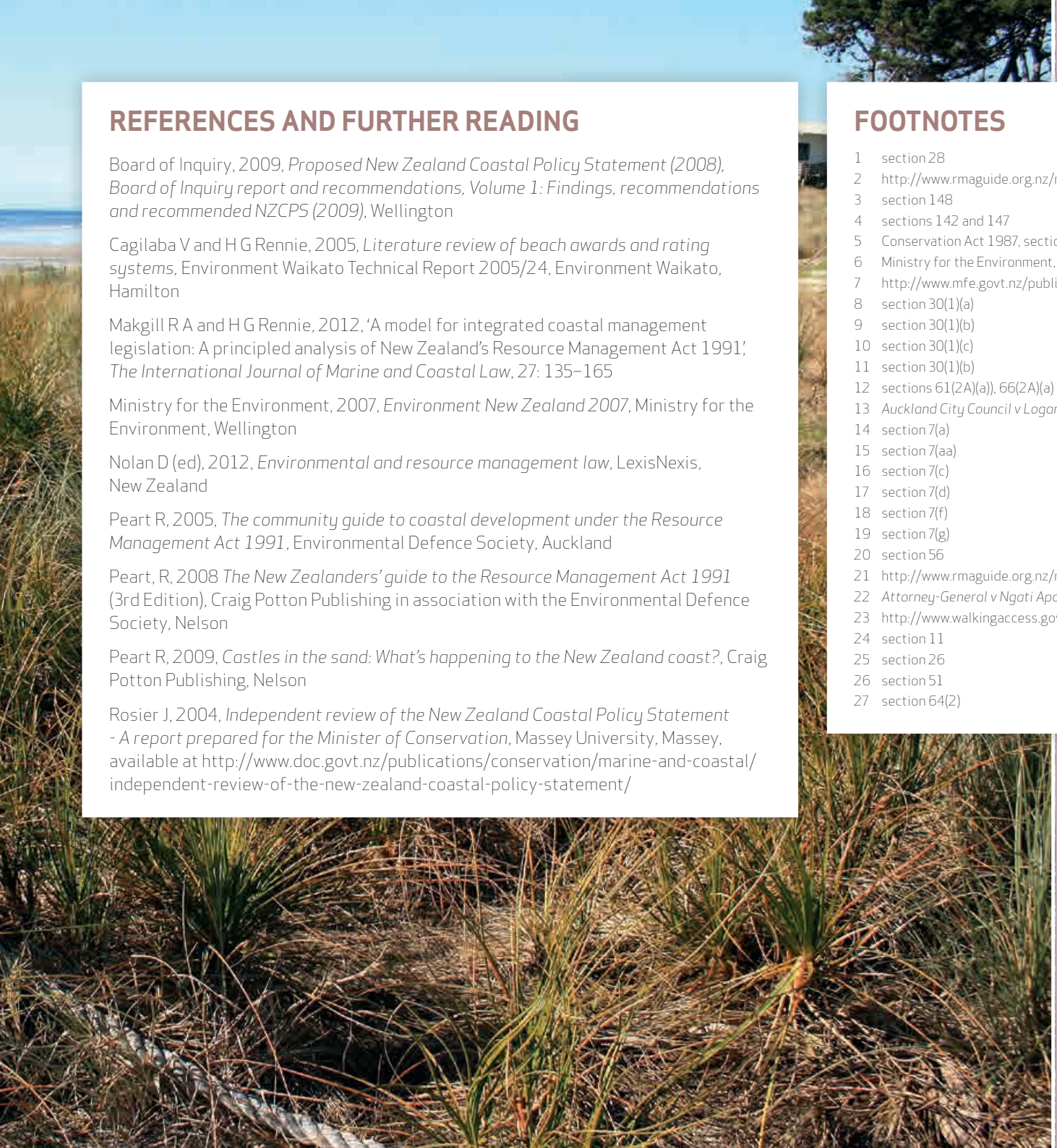
COASTAL MANAGEMENT TOOLS (continued)

Other mechanisms

There are various non-regulatory methods which may be employed, along with appropriate regulatory provisions, to promote high quality coastal management, some of which are outlined below.

Figure 3.2 Examples of other mechanisms used in managing the effects of coastal land development

Mechanism	Example of outcomes
Rating relief	Reduces costs to rural landowners of maintaining coastal land in an undeveloped state and provides some compensation for areas set aside for conservation purposes.
Financial assistance	Can be provided by the council or through other agencies (such as the Queen Elizabeth II National Trust, Nature Heritage Fund and Nga Whenua Rāhui) for fencing, covenanting and pest management costs where areas of land are to be managed for conservation purposes.
Land management agreements	When negotiated between council and landowners, these may provide that the landowner receives some on-going financial compensation for foregoing development opportunities and providing other public benefits such as access to the land for the public.
Conservation lot provisions	Provided for in district plans to enable a landowner to subdivide an additional lot if an important area of coastal habitat or valued landscape is protected in perpetuity. Such provisions need to be designed carefully to ensure that there are real environmental gains.
Design guidelines	Describe and illustrate the kinds of design solutions that the council is looking for in different coastal areas. This may include such considerations as the layout of lots, the location and scale of buildings in the landscape, the type and location of planting, the design of earthworks and the location of infrastructure.
Transfer of powers	Where the council transfers aspects or specific areas of coastal management to iwi authorities under section 33 of the RMA. This enables a kaitiakitanga approach to coastal management to be implemented.
Support for landcare groups	These bring farmers, lifestyle residents and others together to jointly undertake initiatives aimed at sustainable management. Activities can include revegetation, weed and pest control and protection of important habitats.
Support for coast care initiatives	These mobilise communities to restore coastal habitats, such as dune systems, along the coast. Such programmes often provide advice to communities on reducing and repairing habitat damage and on the use of indigenous plants. They may also provide free plants, information brochures, fertilisers and buildings materials.



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FOOTNOTES

1 section 28
2 http://www.rmaguide.org.nz/rma/introduction/glossary.cfm
3 section 148
4 sections 142 and 147
5 Conservation Act 1987, section 2
6 Ministry for the Environment, 2007
7 http://www.mfe.govt.nz/publications/ser/enz07-dec07/
8 section 30(1)(a)
9 section 30(1)(b)
10 section 30(1)(c)
11 section 30(1)(b)
12 sections 61(2A)(a)), 66(2A)(a) and 74(2A)(a)
13 *Auckland City Council v Logan* unreported, HC Auckland, AP77/99, 1 October 1999
14 section 7(a)
15 section 7(aa)
16 section 7(c)
17 section 7(d)
18 section 7(f)
19 section 7(g)
20 section 56
21 http://www.rmaguide.org.nz/regional-legislation/index.cfm
22 *Attorney-General v Ngati Apa* [2003] 3 NZLR
23 http://www.walkingaccess.govt.nz/assets/Uploads/ProtectingPublicAccessChapter.pdf, Page 12
24 section 11
25 section 26
26 section 51
27 section 64(2)

Papamoa, Tauranga

Sandfly Bay, Otago Peninsula

04

COASTAL POLICY

Leigh, Auckland

IN THIS SECTION...

THE NEW ZEALAND COASTAL POLICY STATEMENT 2010

The first NZCPS came into force in 1994. It contained a provision requiring the effectiveness of the NZCPS to be reviewed by someone independent of the Minister no later than nine years after its gazettal. The Minister of Conservation was then to consider the "desirability of reviewing, changing or revoking the Statement".[1]

An independent review of the NZCPS began in 2003, almost 10 years after the document came into force. The review made a series of findings on the effectiveness of the NZCPS including:[2]

- NZCPS policies had been implemented effectively through regional policy statements
- The NZCPS had been effective in changing the practice of directly discharging sewage effluent into the coastal marine area
- The NZCPS had been only partially effective in influencing district plans and subsequent land use planning decisions within the coastal environment
- The NZCPS was only generally referred to in resource consent applications
- There was poor monitoring of environmental outcomes on the coast

As a result of these findings, in 2008 the Minister of Conservation prepared a Proposed NZCPS, and appointed a Board of Inquiry to inquire into and report on it.[3] During the time since the first NZCPS was prepared there had been important shifts in the planning context. Ongoing demand for subdivision, use and development had resulted in significant adverse effects on natural character, public access and other values in the coastal environment. Understanding of coastal hazards, and in particular the potential effects of climate change, had increased substantially. There was rapid expansion in the aquaculture industry with associated effects on coastal ecosystems and other users of the coastal environment. There was also substantial community concern about the degradation of coastal water quality and ecosystems, and a desire to see better management of direct and indirect discharges to the coast, including sewage discharge and other pollutants.

There were some key issues that the Board of Inquiry considered needed to be addressed in a new NZCPS, including:[4]

- Impacts of subdivision, use and development, particularly the extent and scale of subdivision and development on the coast
- Lack of protection of public access to the coastline and the coastal marine area

- Degradation of coastal water quality, particularly as a result of sedimentation
- The challenges resulting from natural hazards which will be exacerbated by sea-level rise and other changes associated with climate change
- Lack of provision for tangata whenua values and interests in sustainable management
- Inadequate recognition of infrastructure needs and the potential for renewable energy projects

As the independent review had noted, the NZCPS 1994 was not a particularly influential document and did not commonly feature as a key factor in coastal management decisions. Submitters to the Board of Inquiry expressed concerns "time and again" that decision-makers were disregarding the NZCPS 1994 when approving resource consent and private plan change applications.[5] The NZCPS 2010 was intended to provide clearer direction on the management of issues that had become more pressing over the prior decade.

A new NZCPS took effect in 2010. Its provisions are set out in full in Appendix One and their application is discussed in Parts Two and Three of this Guide. Overall, the new NZCPS is far more directive, and requires a higher level of protection for natural coastal resources, than the previous document.

Structure of the document

The NZCPS 2010 has a preamble which is designed to assist in interpreting and applying the policy statement. This includes a short statement of the issues which are facing decision-makers, and these provide a focus for the objectives and policies which follow.

There are seven objectives which address the following matters:

- The integrity, form, functioning and resilience of the coastal environment and its ecosystems
- The natural character of the coastal environment, natural features and landscape values
- The Treaty of Waitangi and kaitiakitanga
- Public open space in, and public access to, the coastal environment
- Coastal hazards, including the effects of climate change
- Enabling social, economic and cultural wellbeing
- Recognising and providing for New Zealand's international obligations

The document contains 29 policies which address the following matters:

- The extent and characteristics of the coastal environment
- The Treaty of Waitangi, tangata whenua and Māori heritage
- The precautionary approach
- Integrated management
- Land and waters managed under other Acts
- Activities in the coastal environment
- The need for strategic planning
- Aquaculture
- Ports
- Reclamation and de-reclamation
- Indigenous biological diversity
- Harmful aquatic organisms
- Preservation and restoration of natural character
- Natural features and natural landscapes
- Surf breaks of national significance
- Identification and protection of historic heritage
- Public open space and public access
- Water quality
- Sedimentation
- Discharge of contaminants
- Coastal hazards
- Monitoring and review of the effectiveness of the NZCPS

The application and impact of these new objectives and policies are discussed in detail in Part Two where they relate to specific topics.

The effectiveness of the NZCPS 2010 is to be monitored and reviewed as directed by Policy 28. The monitoring is to be done in collaboration with local authorities and is to provide a national perspective on any emerging trends and issues. The review is to be undertaken within six years of the document's gazettal, which is by 3 November 2016.

How the NZCPS 2010 differs from the NZCPS 1994

Some of the key changes that have been made in the NZCPS 2010 include:

- A strong direction that "avoiding" adverse effects is the starting point for decision-making, particularly

THE NEW ZEALAND COASTAL POLICY STATEMENT 2010 (continued)

in relation to significant values, in order to address cumulative effects and the growing tendency of applicants and decision-makers to focus on mitigation without first considering how to avoid adverse effects

- A focus on avoiding adverse effects on outstanding natural features and landscapes. It provides for greater protection of these than has been occurring, especially at a district level
- A requirement to avoid adverse effects on areas of the coastal environment with "outstanding" natural character, which is a new category
- A requirement to avoid adverse effects on threatened species which provides a new focus on species as well as habitats
- The provision for more integrated management, including across mean high water springs and across local authority boundaries
- A strong direction on the need for strategic planning to identify where particular activities are inappropriate and to more effectively manage cumulative effects on values that are under threat
- A greater focus on the effects of climate change, in particular sea-level rise, not just on settlements and infrastructure but also on biodiversity, public spaces, access and amenity values
- A recognition that a number of uses can occur within the coastal environment, including ports that service national and internal shipping and other regionally and nationally significant infrastructure
- Stronger policies providing for Māori values, including greater recognition of iwi management plans and cultural impact assessments
- A strong direction on the need to assess and identify in plans important natural features, natural landscapes and areas of natural character, as well as areas with degraded coastal water quality
- A strengthening of the obligation to restore the natural character of the coastal environment
- A strengthening of the policies relating to public walking access and new policies recognising the need for public open space and control of vehicle access
- Stronger policies relating to enhancement of water quality, sedimentation and discharge of contaminants, including not allowing untreated discharge of human sewage
- Stronger policies on coastal hazards, requiring a strategic approach that identifies areas at high risk of being affected by coastal hazards during at least the next 100 years. It requires new development or redevelopment that increases the risk of harm from coastal hazards to be avoided, and discourages the use of hard protection structures
- A move away from restricted coastal activities
- A requirement to monitor and report on the effectiveness of the NZCPS 2010 within six years of its introduction (it has previously been set at 10 years)
- Inclusion of a number of policies on new topics, including:
  - ✓ Surf breaks of national importance
  - ✓ Historic heritage
  - ✓ Harmful aquatic organisms
  - ✓ Ports
  - ✓ Aquaculture
  - ✓ Public open space
  - ✓ Vehicle access to the coastline
  - ✓ Sedimentation

The Department of Conservation is preparing overview guidance to provide further information on how the NZCPS 2010 can be effectively implemented.[6] These guidance notes can be found at: www.doc.govt.nz/conservation/marine-and-coastal/coastal-management/nz-coastal-policy-statement/policy-statement-and-guidance/.

Westshore, Napier

DEFINING THE EXTENT OF THE COASTAL ENVIRONMENT

The extent of the coastal environment is not fully defined in the RMA, and as a result there is a lack of clarity as to precisely where the provisions of the NZCPS 2010 apply. The coastal environment clearly includes the coastal marine area, as defined in the RMA, which extends to the outer limits of the territorial sea (12 nautical miles from land). But the landward extent of the coastal environment is left undefined in the RMA and is to be determined at a regional or district level by local authorities based on a number of considerations.

The Environment Court has defined the "coastal environment" as the area in which the coast is a significant part or element.[7] The Court held that this "will vary from place to place and according to the position from which a place is viewed. Where there are hills behind the coast, it will generally extend up to the dominant ridge behind the coast".[8]

The demarcation of this area, using maps, is an important task if local authorities are to give effect to the NZCPS 2010. The ways in which such mapping can be achieved is discussed more fully in Part Two of this Guide. However, the Environment Court has observed that the "coastal environment" is an environment, not a zone. This means "there will frequently be grey areas and blurred edges".[9]

Policy 1 of the NZCPS 2010 states that the extent and characteristics of the coastal environment vary from region to region and locality to locality and lists a number of key features which do form part of the coastal environment.

Policy 1: Extent and characteristics of the coastal environment

1. Recognise that the extent and characteristics of the coastal environment vary from region to region and locality to locality; and the issues that arise may have different effects in different localities.
2. Recognise that the coastal environment includes:
    a. the coastal marine area;
    b. islands within the coastal marine area;
    c. areas where coastal processes, influences or qualities are significant, including coastal lakes, lagoons, tidal estuaries, saltmarshes, coastal wetlands, and the margins of these;
    d. areas at risk from coastal hazards;
    e. coastal vegetation and the habitat of indigenous coastal species including migratory birds;
    f. elements and features that contribute to the natural character, landscape, visual qualities or amenity values;
    g. items of cultural and historic heritage in the coastal marine area or on the coast;
    h. inter-related coastal marine and terrestrial systems, including the intertidal zone; and
    i. physical resources and built facilities, including infrastructure, that have modified the coastal environment.

This means that the coastal environment itself can be defined with reference to living organisms, including how indigenous coastal species move and where coastal vegetation grows.

Whilst the scope of the definition of the coastal environment under the RMA will not normally include entire water catchments, which may extend many kilometres inland, activities within such catchments are especially relevant when dealing with coastal water and habitat quality issues. This is because waterways within the catchments ultimately discharge into the sea and may contain high levels of damaging sediment and pollutants. Because of this close physical linkage, the implementation of the NZCPS 2010 is likely to have implications for wider catchment management.

Makorori, Gisborne

OTHER IMPORTANT MATTERS

Taking a precautionary approach

Policy 3 of the NZCPS 2010 requires that a precautionary approach be taken when effects from proposed activities are uncertain, but could be significantly adverse. There is a particular focus on taking such an approach when dealing with resources that are vulnerable to climate change. This is a key approach that is recognised as part of the Rio Declaration on Environment and Development 1992.

Policy 3: Precautionary approach

1. Adopt a precautionary approach towards proposed activities whose effects on the coastal environment are uncertain, unknown, or little understood, but potentially significantly adverse.
2. In particular, adopt a precautionary approach to use and management of coastal resources potentially vulnerable to effects from climate change, so that:
    a. avoidable social and economic loss and harm to communities does not occur;
    b. natural adjustments for coastal processes, natural defences, ecosystems, habitat and species are allowed to occur; and
    c. the natural character, public access, amenity and other values of the coastal environment meet the needs of future generations.

The Department of Conservation, through its document *NZCPS 2010 Guidance note Policy 3: Precautionary approach*, has suggested that the application of the precautionary approach requires a risk management rather than risk assessment approach. It is when the risk of potential significant adverse or irreversible environmental effects cannot be adequately assessed (because of uncertainty about the nature and consequences of human activities or other processes) that a precautionary approach becomes appropriate.[10]

The implementation of Policy 3 requires a prudent avoidance approach to be taken where the individual or cumulative effects of an activity are uncertain. Adaptive management is one approach which can be applied in some cases of uncertainty but not all. It will not be appropriate, for example, where there is risk of irreversible change, or resources of very high value might be threatened. The New Zealand Biodiversity Strategy 2000 defines adaptive management to include "structured learning by doing".[11] The Biodiversity Strategy notes that adaptive management is most useful when large complex ecological systems are being managed and management decisions cannot wait for final research results. Adaptive planning as a coastal management tool is discussed further in Chapter 15.

Avoiding adverse effects

The NZCPS directs the avoidance of adverse effects in a number of policies. For example, Policy 13(a) and 13(b) both require the avoidance of adverse effects in order to preserve the natural character of the coastal environment and to protect it from inappropriate subdivision, use, and development. The NZCPS 2010 does not contain any definition or direction as to the meaning of "avoid" adverse effects.

However, as a comparison, the NZCPS 1994 in Policy 3.2.2 stated "Adverse effects of subdivision, use or development in the coastal environment should as far as practicable be avoided. Where complete avoidance is not practicable, the adverse effects should be mitigated and provision made for remedying those effects, to the extent practicable". The dropping of "as far as practicable" considerably strengthens what is required when only "avoid" is used in the NZCPS 2010.

The RMA also does not define "avoid". But section 5(2)(c) refers to "avoiding, remedying, or mitigating any adverse effects of activities on the environment". This demonstrates that "avoid" is clearly distinct from "remedy" or "mitigate".

A dictionary definition of the word "avoid" is to "keep away from or stop oneself from doing (something)".[12] This indicates that the NZCPS 2010 is directing councils to prevent adverse effects on highly valued coastal resources from happening in the first place.

In an Environment Court case it was stated that "to avoid is a step short of prohibit however the use of the term avoid sets a presumption … that development in those areas will be inappropriate".[13] The fact that the word "prohibit" is not used reflects the fact that the NZCPS 2010 cannot contain rules (which is the mechanism that prohibits activities) and can only include policies.[14]

In case law decided in a different context, the Environment Court held that "effects" to be considered by decision-makers are any adverse effects regardless of scale and including minor effects. This meaning is also likely to apply where the new requirement to avoid "adverse effects" arises under the NZCPS 2010 as it adopts the RMA definitions. The RMA defines "effect" as including "any … positive or adverse effect … regardless of the scale, intensity, duration, or frequency of the effect".

There is not a blanket requirement to avoid adverse effects under the NZCPS 2010. This requirement only arises in relation to certain policies and in many cases (such as policy 13(1)(b) above) there is a distinction between "avoiding" significant adverse effects and "avoiding, remedying or mitigating" other effects.

The NZCPS 2010 does not contain any definition or direction as to the meaning of "significant" adverse effects. Its normal meaning is therefore to be used. Whether or not adverse effects are "significant" requires a judgment call to be made that will depend on the factual circumstances. The decision-maker will hear evidence on the adverse effects of the activity and then make a finding as to whether or not they are significant. A useful example of where this occurred is in the 2007 Environment Court case of *Save the Point Inc v Wellington City Council*.

Integration

The Board of Inquiry recognised that there were many benefits to be gained through the improved integration and co-ordination of responsibilities under all relevant legislation within the framework of the NZCPS and RMA. In addition, there was a need to integrate planning and policy development across the mean high water springs line. This resulted in Policy 4 which outlines the ways this can be achieved. It also identifies certain situations where such integration is particularly important including:

- Subdivision, use or development which crosses mean high water springs
- Public use of the coast
- Where risks from coastal hazards are potentially high
- Where water quality may be impacted
- Where cumulative effects are occurring or anticipated

Policy 4: Integration

Provide for the integrated management of natural and physical resources in the coastal environment, and activities that affect the coastal environment. This requires:

a. co-ordinated management or control of activities within the coastal environment, and which could cross administrative boundaries, particularly:
   i. the local authority boundary between the coastal marine area and land;
   ii. local authority boundaries within the coastal environment, both within the coastal marine area and on land; and
   iii. where hapū or iwi boundaries or rohe cross local authority boundaries;

b. working collaboratively with other bodies and agencies with responsibilities and functions relevant to resource management, such as where land or waters are held or managed for conservation purposes; and

c. particular consideration of situations where:
   i. subdivision, use, or development and its effects above or below the line of mean high water springs will require, or is likely to result in, associated use or development that crosses the line of mean high water springs; or
   ii. public use and enjoyment of public space in the coastal environment is affected, or is likely to be affected; or
   iii. development or land management practices may be affected by physical changes to the coastal environment or potential inundation from coastal hazards, including as a result of climate change; or
   iv. land use activities affect, or are likely to affect, water quality in the coastal environment and marine ecosystems through increasing sedimentation; or
   v. significant adverse cumulative effects are occurring, or can be anticipated.

Umupuia, Auckland

Port Chalmers, Otago Harbour

Salmon Farm, Ruakākā Bay, Marlborough

OTHER IMPORTANT MATTERS (continued)

Policy 5 addresses the effects of activities on lands or waters managed or held under other Acts, and is also relevant to integrated management. Protected areas within the coastal environment, such as marine reserves and land-based scenic reserves, can contribute significantly to biodiversity, natural character, public open space and amenity values of a region or district. These areas are frequently important to the achievement of sustainable management and are often vulnerable to the effects of activities proposed in surrounding lands and waters.

Integrated planning, as a valuable tool in coastal management, is discussed in Chapter 15 and some examples and case studies provided. Voluntary measures can also assist with achieving better integration.

Activities

There is a growing recognition that activities can have a significant impact on the coastal environment. Inland activities influence water quality and coastal-based activities can increase the risks from natural hazards. There is also increasing demand for, and conflict over, space for marine-based activities. The NZCPS 2010 provides reasonably clear direction on the appropriate location and scale of activities in the coastal environment. This level of direction is a step change from its predecessor. However, actual decisions on whether something is appropriate will depend on the facts of the case and require evaluation in the context of the RMA, including Part II.

The impact of different activities on the coastal environment is discussed in detail in Part Two of this guide where they relate to specific topics. The impact of marine-based activities on coastal environments is discussed in further detail in the EDS community guide *Managing the marine environment* available at www.eds.org.nz.

Through a number of the objectives, there is an impetus to ensure that activities do not compromise the protection of important natural coastal resources. As already indicated, Policy 3(a) requires a precautionary approach to be taken when considering the effects of activities on the coastal environment. Policy 6 specifically focuses on coastal activities and addresses their impacts. In addition, policies 8 and 9 respectively recognise the contribution that aquaculture and ports make to the local economy and community well-being. These policies attempt to strike an effective balance between providing for activities in the coastal environment and ensuring that important natural resources and community and cultural values are protected in doing so.

Policy 6: Activities in the coastal environment

1. In relation to the coastal environment:
    a. recognise that the provision of infrastructure, the supply and transport of energy including the generation and transmission of electricity, and the extraction of minerals are activities important to the social, economic and cultural well-being of people and communities;
    b. consider the rate at which built development and the associated public infrastructure should be enabled to provide for the reasonably foreseeable needs of population growth without compromising the other values of the coastal environment;
    c. encourage the consolidation of existing coastal settlements and urban areas where this will contribute to the avoidance or mitigation of sprawling or sporadic patterns of settlement and urban growth;
    d. recognise tangata whenua needs for papakāinga, marae and associated developments and make appropriate provision for them;
    e. consider where and how built development on land should be controlled so that it does not compromise activities of national or regional importance that have a functional need to locate and operate in the coastal marine area;
    f. consider where development that maintains the character of the existing built environment should be encouraged, and where development resulting in a change in character would be acceptable;
    g. take into account the potential of renewable resources in the coastal environment, such as energy from wind, waves, currents and tides, to meet the reasonably foreseeable needs of future generations;
    h. consider how adverse visual impacts of development can be avoided in areas sensitive to such effects, such as headlands and prominent ridgelines, and as far as practicable and reasonable apply controls or conditions to avoid those effects;
    i. set back development from the coastal marine area and other water bodies, where practicable and reasonable, to protect the natural character, open space, public access and amenity values of the coastal environment; and
    j. where appropriate, buffer areas and sites of significant indigenous biological diversity, or historic heritage value.
2. Additionally, in relation to the coastal marine area:
    a. recognise potential contributions to the social, economic and cultural wellbeing of people and communities from use and development of the coastal marine area, including the potential for renewable marine energy to contribute to meeting the energy needs of future generations;
    b. recognise the need to maintain and enhance the public open space and recreation qualities and values of the coastal marine area;
    c. recognise that there are activities that have a functional need to be located in the coastal marine area, and provide for those activities in appropriate places;
    d. recognise that activities that do not have a functional need for location in the coastal marine area generally should not be located there; and
    e. promote the efficient use of occupied space, including by:
        i. requiring that structures be made available for public or multiple use wherever reasonable and practicable;
        ii requiring the removal of any abandoned or redundant structure that has no heritage, amenity or reuse value; and
        iii. considering whether consent conditions should be applied to ensure that space occupied for an activity is used for that purpose effectively and without unreasonable delay.

OTHER IMPORTANT MATTERS (continued)

The Department of Conservation has prepared a guidance note which provides detailed assistance to decision-makers on implementing Policy 6. Through this policy the Department encourages local authorities to identify what activities have a functional need to be in the coastal marine area, and to provide for those activities in appropriate places.[15] There is a direction in Policy 6 for decision-makers to consider "reasonably foreseeable needs" when determining the rate at which built development and associated public infrastructure should be provided for. Such future needs are also to be considered when making provision for renewable wind and marine energy generation.

In addition, the Department of Conservation has prepared a guidance note on implementing Policies 8 and 9 which is a valuable resource for any local authority incorporating provisions for aquaculture and port facilities into its planning documents. This topic is discussed in further detail in the EDS community guide *Managing the marine environment* available at www.eds.org.nz.

Strategic planning

The NZCPS 2010 strengthens the need for strategic planning, which is encompassed in many of the policies, but particularly in Policy 7. This policy also supports the integrative and collaborative approaches promoted by Policy 4. Implementation of Policy 7 will also depend on the technical and other information gathered to implement other policies including indigenous biodiversity (Policy 11), natural character (Policy 13), natural features and natural landscapes (Policy 15) and coastal water quality (Policy 21).

Policy 7: Strategic planning

1. In preparing regional policy statements, and plans:
    a. consider where, how and when to provide for future residential, rural residential, settlement, urban development and other activities in the coastal environment at a regional and district level; and
    b. identify areas of the coastal environment where particular activities and forms of subdivision, use, and development:
        i. are inappropriate; and
        ii. may be inappropriate without the consideration of effects through a resource consent application, notice of requirement for designation or Schedule 1 of the Resource Management Act process; and provide protection from inappropriate subdivision, use, and development in these areas through objectives, policies and rules.
2. Identify in regional policy statements, and plans, coastal processes, resources or values that are under threat or at significant risk from adverse cumulative effects. Include provisions in plans to manage these effects. Where practicable, in plans, set thresholds (including zones, standards or targets), or specify acceptable limits to change, to assist in determining when activities causing adverse cumulative effects are to be avoided.

The addition of this policy stemmed from concern that the lack of strategic and spatial planning to date has resulted in poor management of cumulative effects within the coastal environment. Policy 7 provides clear direction on how regional and district councils should apply strategic planning to the coastal environment. This includes identifying coastal processes, resources or values that are under threat from cumulative effects as well as identifying areas of the coastal environment where activities are inappropriate. As a result, it is expected that thresholds for managing important natural values will be identified in statutory plans.

The Department of Conservation has prepared a guidance note on implementing Policy 7 which discusses how the assessment of known coastal uses and values is required to inform strategic planning and decisions about the appropriateness of activities. It indicates that these areas can include strategically important assets, such as major ports or navigation routes, through to ecologically important yet vulnerable places, such as estuaries. The guidance note also highlights the importance of recognising that ecologically important areas may be valuable because of the environmental goods and services they produce (e.g. estuaries can support important fish spawning habitats).[16]

Strategic planning as an important tool in coastal management is discussed in Chapter 15 and some examples and case studies are provided there.

The amount of work required to give effect to the NZCPS 2010 will reflect the issues occurring in each region and district, and the amount of planning already done. As a general principle, strategic planning will be effective if it "protects the environmental goods and services that are important to community economic and social well-being".[17] Strategic planning is an approach which can help districts and regions to work constructively together to share knowledge and to engage with their communities on the vision for their coastal environment over longer time scales.

WHAT THE NZCPS 2010 MEANS FOR PLANNING DOCUMENTS AND RESOURCE CONSENTS DECISIONS

All regional policy statements, regional plans and district plans must give effect to the NZCPS 2010. Local authorities must make amendments to planning documents to achieve this "as soon as practicable" using the process for changes to policy statements and plans set out in Schedule 1 of the RMA.[18]

There is little case law on what "as soon as practicable" means in the context of the RMA. However, the courts have noted in this and similar contexts that practicability is a question of fact and degree. The Department of Conservation notes that "in a practical sense this means that council documents need to be amended at the first reasonable opportunity".[19] This may depend on the local authority's resources and the extent of work required, which is expected to vary between local authorities. However, councils must act to give effect to the NZCPS 2010 in their planning documents promptly and cannot leave the matter because taking action would be inconvenient or take resources away from other council activities.

The Department of Conservation has prepared a *NZPCS 2010 Implementation guidance introductory note* which discusses this matter. It confirms that what is practicable or reasonable will depend on the particular facts of a situation. Development of amendments to give effect to some policies is likely to require significant work and time, whereas amendments requiring less work could be made more quickly.[20] However, the note outlines that whether it is "practicable" to make amendments all at the same time or gradually is a matter for the individual local authority, but there is an expectation that this process will be advanced as quickly as possible.

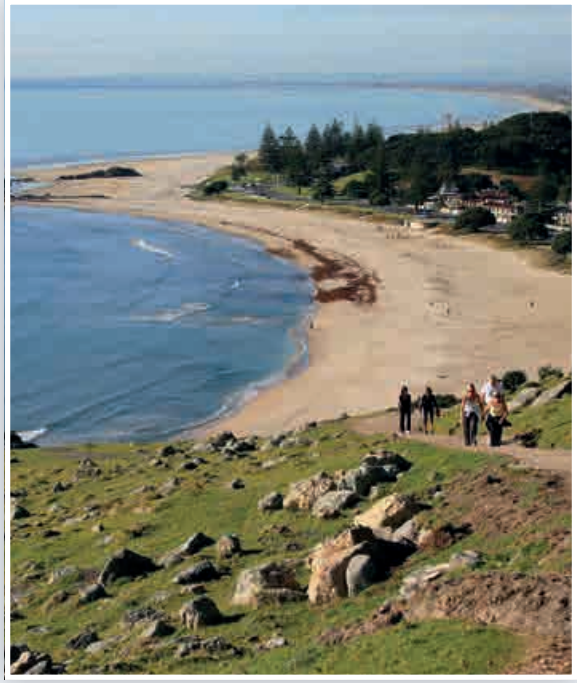
A number of local authorities have started to give effect to the NZCPS 2010 by beginning the plan change process, including the preparation of a gap analysis of regional policy statements and regional and district plans against the provisions of the NZCPS 2010, and making changes through reviews of these documents.

Example: Bay of Plenty Regional Council gap analysis for Regional Coastal Environment Plan

This assessment highlighted the fundamental importance of identifying and mapping the landward extent of the coastal environment. Additional identification and mapping of specific management areas was also required, including areas of outstanding and high natural character and indigenous biological diversity preservation and protection areas. The assessment identified that new or amended policy would be required to protect the values in those areas. In addition, the gap analysis found that a range of amendments to the plan would be required to recognise and enable appropriate use and development particularly that associated with energy generation and transmission, aquaculture, ports, walking access and vehicle access.[21] Less amendment was required to some of the existing provisions that control use and development of coastal areas.

Consent authorities must have regard to the NZCPS 2010 when considering an application for resource consent within the coastal environment, even if the relevant plans have not yet been amended to give effect to the document.[22] Some resource consent applications (depending on activity status) may be turned down if they are inconsistent with the policies contained in the NZCPS 2010. Consideration of requirements for designations, heritage orders and applications for water conservation orders are similarly affected. The value of the NZCPS 2010 is that it provides clear direction to local authorities on what relevant effects should be considered when making a decision on a resource consent application.

Quality coastal decision-making relies on strong linkages between technical understanding underpinned by robust science, high quality stakeholder input and a solid appreciation of the policy framework. The NZCPS 2010 policies flag the areas where technical information is particularly needed to address long term strategic issues affecting the coast.



Mount Maunganui, Bay of Plenty

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3 Board of Inquiry, 2009
4 Board of Inquiry, 2009, 4
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Opoutere, Thames-Coromandel District

PART TWO

Langs Beach, Whangarei District

Karikari Peninsula, Far North District

05 PRESERVING NATURAL CHARACTER

Cavalli Passage, Far North District

IN THIS SECTION...

INTRODUCTION

The RMA places particular emphasis on preserving the natural character of the coast. Natural character includes the natural processes, elements and patterns which are present in the coastal environment. As a concept it considers ecological, hydrological and landform components of the natural environment as well as the values people ascribe to these. An area does not need to be pristine or wholly indigenous, to have high or outstanding natural character.

Almost all of New Zealand's coast, including the coastal marine area, has been impacted upon by human activity at some stage and has lost natural character to some degree. However there are still many areas of the coast where the natural (but modified) environment predominates and which are highly valued by New Zealanders.

Marlborough Sounds

VISION

Objective 2 of the NZCPS 2010 sets out a vision for the preservation of the natural character of New Zealand's coast. It recognises the "characteristics and qualities" that contribute to natural character and the importance of identifying areas where development is inappropriate and where these characteristics and qualities should be protected. It also encourages restoration of the coastal environment. Preserving natural character requires maintaining natural processes, elements and patterns, including those within the coastal marine area. In addition, it requires the integrity, functioning and resilience of the coastal environment to be preserved.

Objective 2

To preserve the natural character of the coastal environment and protect natural features and landscape values through:

- recognising the characteristics and qualities that contribute to natural character, natural features and landscape values and their location and distribution;
- identifying those areas where various forms of subdivision, use, and development would be inappropriate and protecting them from such activities; and
- encouraging restoration of the coastal environment

It is widely recognised that areas with high natural character are not currently adequately protected, particularly in relation to cumulative impacts. In order to give greater weight to this matter, the NZCPS 2010 takes a more strategic approach to this issue than its predecessor. There is an expectation within the NZCPS 2010 that important areas of natural character will be mapped and strategic planning used to ensure that they are protected from incremental degradation.

ISSUES

The natural character of the coast is an important resource and can be lost through the incremental impacts of subdivision, use and development. Most development will impact on the natural character of the coast to some degree, because it introduces additional structures and activities into a natural environment.

Activities and developments which can significantly impact on natural character include:

- Coastal subdivision and associated urban development
- Infrastructure such as causeways, roads, pylons, waste water treatment plants and outfalls
- Coastal structures such as wharves, jetties, marinas, seawalls and reclamations
- Rural activities such as farming and forestry
- Marine activities such as dredging, dredge disposal and aquaculture
- Aggregate and mineral extraction

The impact of these kinds of developments will, however, depend on a number of factors. These include how heavily modified the proposed site is; the site's coastal context including the extent to which the site is influenced by coastal processes; the structure and composition of biota; and how well the development has been designed to fit in with these factors. Different habitat types are also affected to varying degrees by activities.

Use and development can impact on natural character in a number of ways including:

- Placing intrusive and visually dominant human-made structures within the landscape
- Changing natural landforms through earthworks
- Clearing indigenous vegetation
- Destroying or degrading indigenous habitats such as reefs, estuaries, wetlands, dunes and riparian margins
- Disrupting natural drainage patterns
- Disrupting natural coastal processes through activities such as beach replenishment, reclamations and coastal structures
- Increasing sediment, nutrients and other contaminants which drain into the marine area
- Directly discharging sediments and contaminants into the marine area
- Decreasing sediment transport into the marine area
- Disrupting natural patterns and creating hard edges and geometric patterns through inappropriate landscaping and using species which are not naturally from the local area

Residential development can degrade natural character by placing large buildings and structures within the natural setting. Often these are accompanied by earthworks and cuttings to create a building platform and to construct access roads and driveways. The new roofs and paved areas can increase contaminated stormwater runoff into waterways, and ultimately the marine area. If constructed close

ISSUES (continued)

to the coastal edge, the buildings and associated infrastructure can directly obstruct physical coastal processes. Some houses on islands or in remoter areas are associated with the provision of moorings and jetties. Although one building may only have a relatively small impact on its own, if sensitively located and designed, additional buildings can incrementally and cumulatively result in significant degradation of natural character. These developments can also increase weed and pest issues and introduce increased numbers of cats and dogs to a locality.

Poor land management practices (such as weak weed and pest control, failure to exclude stock from natural waterways and coastal margins, over-stocking and under-grazing areas of indigenous vegetation) can also have a significant impact on natural character through the resulting soil degradation, erosion and slumping, weed infestation, destruction of natural habitats and the degradation of river and coastal margins and water quality.

On the positive side, development sometimes provides an opportunity for the natural character of degraded coastal areas to be increased through destocking, replanting and restoration initiatives as well as de-reclamation of redundant reclaimed land. Development which restores important natural elements such as indigenous vegetation, wetlands and dunes, and ultimately the ecological and hydrological processes associated with these, is more likely to be appropriate in the coastal environment.

POLICY

Defining natural character

Over the past 20 years, a working definition has been developed, through case law and professional practice, which indicates that natural character has three main components: natural processes, natural elements and natural patterns. Natural processes include the action of rivers, waves, tides, wind and rain as well as the movement of coastal plants and animals. Natural processes produce natural elements including landforms, vegetation cover and marine habitats. The distribution of these natural elements over an area forms natural patterns. A fourth important component is the human experiences of these natural processes, elements and patterns and values ascribed to them.

While the NZCPS 2010 does not provide a definition of natural character, it does identify some of the key factors which can contribute to, or be a part of, natural character. Policy 13(2) gives further direction on the meaning of the term natural character.

Policy 13(2): Preservation of natural character

2. Recognise that natural character is not the same as natural features and landscapes or amenity values and may include matters such as:
   a. natural elements, processes and patterns;
   b. biophysical, ecological, geological and geomorphological aspects;
   c. natural landforms such as headlands, peninsulas, cliffs, dunes, wetlands, reefs, freshwater springs and surf breaks;
   d. the natural movement of water and sediment;
   e. the natural darkness of the night sky;
   f. places or areas that are wild or scenic;
   g. a range of natural character from pristine to modified; and
   h. experiential attributes, including the sounds and smell of the sea; and their context or setting.

Mangawhai Spit, Kaipara District

The policy makes it clear that natural character includes all natural aspects of the land and sea, including the underlying ecological, hydrological and geomorphological processes that shape landforms (including underwater features), and the natural movements of water and sediment. Natural character also includes aspects of the environment that affect human experience including natural darkness of the night sky, the sounds and smell of the coast, and the context and setting of natural places.

Case law provides further guidance on the meaning of natural character. The Environment Court has held that "natural" does not mean "endemic to New Zealand" or "pristine".[1] Natural character connotes a range of qualities and features which are created by nature, as distinct from human-made constructions. "Natural character" may include things such as pasture, and exotic trees and wildlife, both wild and domestic. It does not include human-made structures, roads or machinery. This means that parts of the coast where indigenous vegetation has been replaced with pasture can still have high natural character, so long as built structures do not dominate the environment.

Policy 13(2) makes it clear that there is a spectrum of natural character from pristine to modified. The absence of certain vegetation, landforms or water features may simply mean that the landscape is less natural rather than non-natural. Natural character exists to some degree on all coasts, even in highly modified environments, because of the continued influence of the wind, waves and tides.

Policy 13(1) introduces, for the first time, the term "outstanding natural character", which was not previously used in policy or case law. The Board of Inquiry recommendations for the NZCPS 2010 only used the term "high natural character" in Policy 13, whereas the operative version uses the term "outstanding natural character". Some people have expressed concern that the term "outstanding natural character" introduces confusion or overlap with the natural landscape and features provisions in Policy 15 which also refer to "outstanding".

The Environment Court has suggested that the quality of "natural character" of the coastal environment (Policy 13) is likely to be different in most cases from the "naturalness" of landscapes (Policy 15) generally.[2]

Te Arai, Auckland

The coastal environment (usually) contains different qualities from terrestrial landscapes, such as headlands, dunes, reefs and surf breaks and the sound and smell of the sea.

Assessing natural character

A Ministry for the Environment workshop, held in 2002, developed a working definition of natural character. This was revised at a Department of Conservation workshop held in August 2011 as follows:[3]

> Natural character is the term used to describe the natural elements of all coastal environments. The degree or level of natural character within an environment depends on:
>
> 1. The extent to which the natural elements, patterns and processes* occur;
> 2. The nature and extent of modification to the ecosystems and landscape/seascape;
> 3. The degree of natural character is highest where there is least modification;
> 4. The effect of different types of modification upon natural character varies with context and may be perceived differently by different parts of the community.
>
> * For the purposes of interpreting the NZCPS 2010 Policy 13.2, "elements, patterns and processes" means: biophysical, ecological, geological and geomorphological aspects; natural landforms such as headlands, peninsulas, cliffs, dunes, wetlands, reefs, freshwater springs and surf breaks; and the natural movement of water and sediment.

There is currently no national guidance on how to undertake an assessment of natural character. The Department of Conservation is currently working on a guidance document for natural character assessment. There are other projects underway around the country

POLICY (continued)

where natural character has been assessed which provide some useful guidance.

Example: Natural character mapping methodology in the Northland region[4]

Key steps used in measuring coastal natural character in Northland included:

- Using a comprehensive set of criteria to determine which areas were definitely not of high natural character
- For the remaining area, manually depicting units (based on environment type and relatively homogeneous levels of natural character) on aerial images or marine charts, and then digitising those units with geo-referencing
- Scoring each identified unit using the QINCCE (Quantitative Index for measuring the Natural Character of the Coastal Environment) methodology after collecting relevant descriptive and other evaluative information about those units. This included field evaluations and using remote (satellite) imagery and existing technical documents
- Using the calculated natural character indices for each unit to determine which units were of high and outstanding natural character. This was based on whether they met numerical thresholds (initially based on work in three equivalent regions and adjusted progressively for this project). Then several additional screening criteria relating to the naturalness of the auditory environment and the night lighting/darkness were applied to further remove some sites from meeting a high or outstanding threshold

Preserving natural character

The RMA section 6(a) states that natural character of the coastal environment is to be "preserved" as a matter of national importance. This indicates the need to maintain it in its existing state. This is to be achieved, amongst other things, by its "protection" against the threat of inappropriate development.

Policy 13(1): Preservation of natural character

1. To preserve the natural character of the coastal environment and to protect it from inappropriate subdivision, use, and development:
   a. avoid adverse effects of activities on natural character in areas of the coastal environment with outstanding natural character; and
   b. avoid significant adverse effects and avoid, remedy or mitigate other adverse effects of activities on natural character in all other areas of the coastal environment;

   including by:
   c. assessing the natural character of the coastal environment of the region or district, by mapping or otherwise identifying at least areas of high natural character; and
   d. ensuring that regional policy statements, and plans, identify areas where preserving natural character requires objectives, policies and rules, and include those provisions.

Policy 13(1) gives strong direction as to how policy statements and plans should preserve and protect natural character:

- It directs councils to "avoid adverse effects" of activities in areas of the coast with "outstanding natural character". The term "avoid" has been discussed in Chapter 4. The Environment Court has noted that, although the NZCPS 2010 recognises that some uses and developments are important, this does not go so far as to outweigh the protection of areas of outstanding natural character.[5]
- Councils are to avoid "significant" adverse effects on natural character in all other areas of the coastal environment. The term "significant" has been discussed in Chapter 4.
- Outside areas of outstanding natural character, and where adverse effects are not significant, councils must "avoid, remedy or mitigate" adverse effects.

This means that areas with outstanding natural character values, and those places where the natural environment is predominant, should receive the greatest protection. However, the remaining natural character of all areas of the coastal environment is protected from significant adverse effects.

In order to achieve such protection, councils are required to first assess the natural character of their district or region, as described above. This assessment should consider natural character in the land, freshwater and marine components of the coastal environment, including sub-surface elements. Then areas of high natural character, at least, need to be identified in the council's policy statement or plan. This can either be by mapping, or by another means such as description. Once the areas have been identified, plans need to include provisions (where required) to preserve natural character through avoiding adverse effects as discussed above.

For example, the NZCPS 2010 specifically addresses the need to protect nationally significant surf breaks (which Policy 13(2)(c) recognises as being part of the natural character of the coastal environment) by ensuring that activities do not adversely affect them (Policy 16). Seventeen locations of surf breaks of national significance are listed in Schedule 1.

Cumulative impacts on natural character can best be managed through strategic planning. NZCPS 2010 Policy 7 (Strategic planning) requires consideration of where, how and when to provide for future use and development. It also directs the identification of areas where particular activities may be inappropriate, and this may be due to their impacts on natural character. In addition, provisions need to be developed to provide for the protection of these areas from inappropriate activities. This policy has been discussed in Chapter 4.

Policy 6 indicates how development can be located to reduce impacts on natural character. This includes consolidating urban settlements and avoiding urban sprawl; avoiding visually sensitive areas such as ridgelines and headlands; and setting structures well back from the coastal edge.

Policy 6: Activities in the coastal environment

1. In relation to the coastal environment: …

    c. encourage the consolidation of existing coastal settlements and urban areas where this will contribute to the avoidance or mitigation of sprawling or sporadic patterns of settlement and urban growth; …

    h. consider how adverse visual impacts of development can be avoided in areas sensitive to such effects, such as headlands and prominent ridgelines, and as far as practicable and reasonable apply controls or conditions to avoid those effects;

    i. set back development from the coastal marine area and other water bodies, where practicable and reasonable, to protect the natural character, open space, public access and amenity values of the coastal environment; and…

Pataua, Whangarei District

Regional and district plans can indicate that an activity is inappropriate by setting a non-complying or prohibited activity status. They may provide that, whether or not an activity is appropriate will depend on factors such as location and scale, by prescribing a discretionary status. Alternatively plans may indicate that an activity is appropriate in all cases by providing for it as either a permitted or controlled activity.

Policy 7 also addresses cumulative effects and requires regional policy statements and plans to identify "coastal processes, resources or values" such as natural character "that are under threat or at significant risk from adverse cumulative effects". The plans must then include provisions to manage those effects including setting thresholds where practicable.

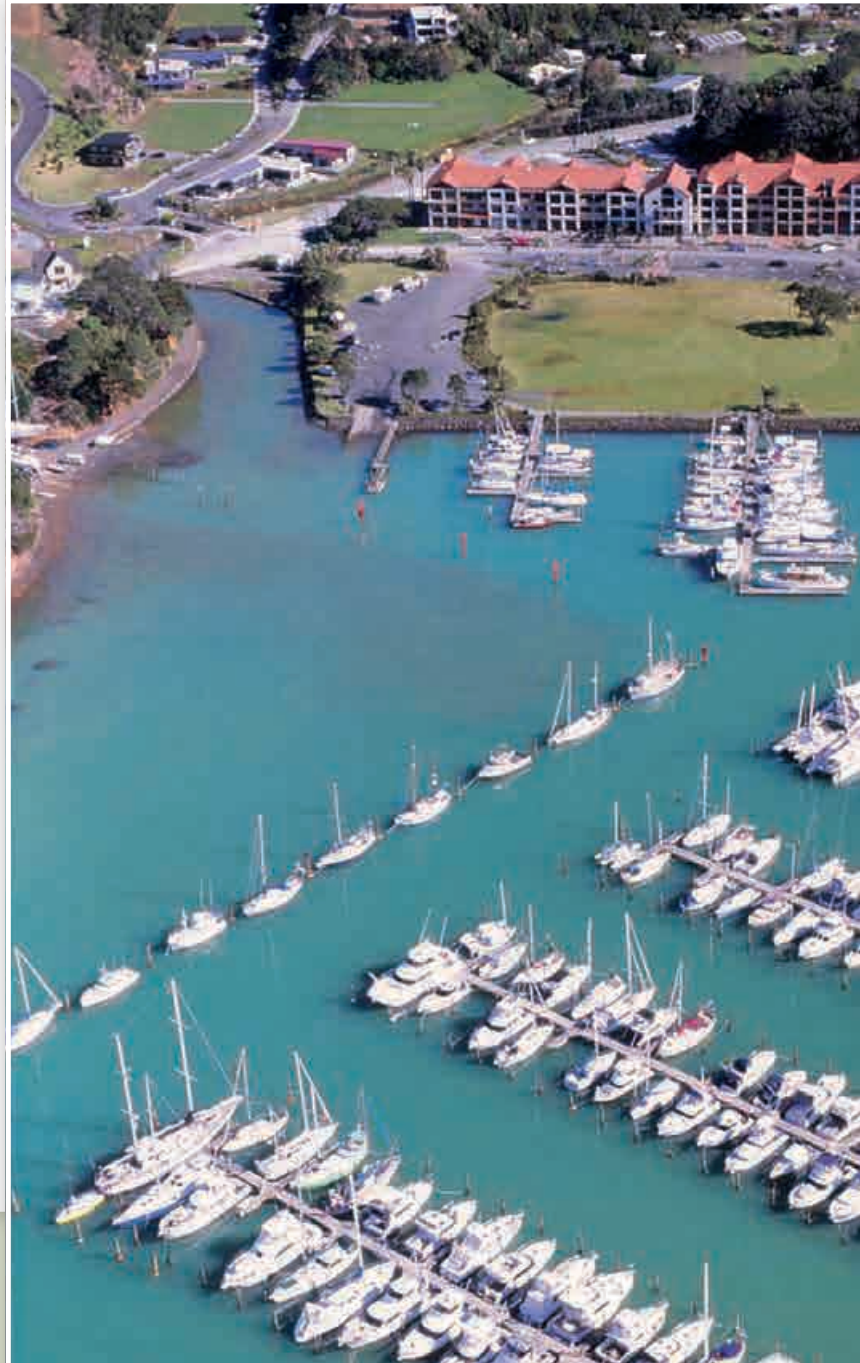
Reclamation and infilling of coastal areas began with the first development of ports in the mid-1800s. Since then this activity, which has provided land for many of New Zealand's coastal cities, has significantly reduced the natural character of the surrounding coastline and adjacent marine area.

Policy 10 of the NZPCS 2010 addresses the issue of reclamation and infilling by discussing the appropriateness of any reclamation and requiring a clear identification of the purpose for which it is required. It requires reclamation to be avoided in the first instance and provides that it should only occur if a number of criteria are met including that there is no practicable alternative method of providing for the activity and that it will provide significant regional or national benefit. Policy 10 also encourages the de-reclamation of redundant reclaimed land where it would restore natural character and provide for more public open space.

POLICY (continued)

Policy 10: Reclamation and de-reclamation

1. Avoid reclamation of land in the coastal marine area, unless:
    a. land outside the coastal marine area is not available for the proposed activity;
    b. the activity which requires reclamation can only occur in or adjacent to the coastal marine area;
    c. there are no practicable alternative methods of providing the activity; and
    d. the reclamation will provide significant regional or national benefit.
2. Where a reclamation is considered to be a suitable use of the coastal marine area, in considering its form and design have particular regard to:
    a. the potential effects on the site of climate change, including sea level rise, over no less than 100 years;
    b. the shape of the reclamation and, where appropriate, whether the materials used are visually and aesthetically compatible with the adjoining coast;
    c. the use of materials in the reclamation, including avoiding the use of contaminated materials that could significantly adversely affect water quality, aquatic ecosystems and indigenous biodiversity in the coastal marine area;
    d. providing public access, including providing access to and along the coastal marine area at high tide where practicable, unless a restriction on public access is appropriate as provided for in Policy 19;
    e. the ability to remedy or mitigate adverse effects on the coastal environment;
    f. whether the proposed activity will affect cultural landscapes and sites of significance to tangata whenua; and
    g. the ability to avoid consequential erosion and accretion, and other natural hazards.
3. In considering proposed reclamations, have particular regard to the extent to which the reclamation and intended purpose would provide for the efficient operation of infrastructure, including ports, airports, coastal roads, pipelines, electricity transmission, railways and ferry terminals, and of marinas and electricity generation.
4. De-reclamation of redundant reclaimed land is encouraged where it would:
    a. restore the natural character and resources of the coastal marine area; and
    b. provide for more public open space.



Tutukāka, Whangarei District

Restoring natural character

Development provides an opportunity for the natural character of degraded coastal areas to be increased through replanting and restoration initiatives. Activities which restore important natural elements such as indigenous vegetation, wetlands and dunes, and therefore increase some elements of natural character, are more likely to be appropriate in the coastal environment.

Policy 14 states that restoration or rehabilitation of the natural character of the coastal environment should be promoted. Councils are directed to undertake a number of tasks to achieve this. First they are required to identify "areas and opportunities" for restoration and rehabilitation. Secondly, they must include provisions in their policy statements or plans "directed at" restoration or rehabilitation. Thirdly, they are to consider imposing restoration and rehabilitation conditions on resource consents and designations.

Pakiri, Auckland

Policy 14: Restoration of natural character

Promote restoration or rehabilitation of the natural character of the coastal environment, including by:

a. identifying areas and opportunities for restoration or rehabilitation;

b. providing policies, rules and other methods directed at restoration or rehabilitation in regional policy statements, and plans;

c. where practicable, imposing or reviewing restoration or rehabilitation conditions on resource consents and designations, including for the continuation of activities; and recognising that where degraded areas of the coastal environment require restoration or rehabilitation, possible approaches include:

   i. restoring indigenous habitats and ecosystems, using local genetic stock where practicable; or

   ii encouraging natural regeneration of indigenous species, recognising the need for effective weed and animal pest management; or

   iii. creating or enhancing habitat for indigenous species; or

   iv. rehabilitating dunes and other natural coastal features or processes, including saline wetlands and intertidal saltmarsh; or

   v. restoring and protecting riparian and intertidal margins; or

   vi. reducing or eliminating discharges of contaminants; or

   vii. removing redundant structures and materials that have been assessed to have minimal heritage or amenity values and when the removal is authorised by required permits, including an archaeological authority under the Historic Places Act 1993; or

   viii. restoring cultural landscape features; or

   ix. redesign of structures that interfere with ecosystem processes; or

   x. decommissioning or restoring historic landfill and other contaminated sites which are, or have the potential to, leach material into the coastal marine area.

POLICY (continued)

Policy 14 sets out a number of approaches which may be used to restore and rehabilitate the coast. These include:

- Restoration planting (which should be undertaken with local genetic stock of indigenous species where possible)
- Weed and pest management (which can help encourage natural regeneration of indigenous species)
- Restoration of important coastal features such as dunes, saline wetlands, intertidal zones and riparian areas (which can help increase natural character values)
- Reducing or eliminating the discharge of contaminants into the coastal environment
- Removal of human influences where they are having a negative impact on the environment, such as inappropriate structures

Effective catchment management will be required to address the discharge of nutrients and sediment from land. Such discharges can significantly reduce the natural character of the coastal marine environment.

Policy 18 indicates that areas of open space in the coastal environment should be provided with appropriate protection. It will, therefore, not always be appropriate to restore all areas with indigenous vegetation. Open pastoral landscapes can be highly valued and this may outweigh the imperative to increase natural character through replanting.

At the time of writing the Department of Conservation implementation guidance on Policies 13 and 14 was still in development. Natural character preservation in the marine environment is discussed in more detail in the EDS community guide *Managing the marine environment* available at www.eds.org.nz.

Mountain Landing, Bay of Islands

BEST PRACTICE DESIGN ELEMENTS

Coastal land development designed to preserve natural character within the coastal environment can include the following elements:

RETAIN NATURAL LANDFORMS

Through the development process preserve the natural landforms, ecological processes and drainage patterns that occur within the site.

Key points to consider:

- Locate buildings well back from important landforms and key providers of ecological processes, such as streams and wetlands
- Maintain a natural vegetation buffer
- Minimise earthworks

Undesirable example **Cable Bay, Far North District**

By cutting into the natural land contours, and failing to reinstate indigenous vegetation cover, this development has negatively impacted on the natural character of this site

Desirable example **Tryphena, Great Barrier Island**

These houses have been incorporated into the natural landform, and have retained the surrounding indigenous vegetation, thereby reducing their impact on natural character

BEST PRACTICE DESIGN ELEMENTS (continued)

AVOID VISUALLY-INTRUSIVE STRUCTURES

Minimise the amount of visually-invasive structures, buildings and infrastructure.

Key points to consider:

- Keep buildings off headlands and ridgelines
- Provide a generous set back from the coastal edge and riparian margins
- Adopt a building design and form that is in keeping with the coastal environment

Undesirable example **Little Kaiteriteri Beach, Tasman District**

These large visually-intrusive houses, several constructed on the ridgeline, have had a significant impact on the natural character of this beach

Desirable example **Medlands Beach, Great Barrier Island**

These houses have been built with a generous setback from the coastal margin, and have been kept off the prominent headland, which has retained much of the natural character of the beach

BEST PRACTICE DESIGN ELEMENTS (continued)

ENHANCE NATIVE COASTAL VEGETATION

Protect, restore and enhance indigenous coastal vegetation and habitats.

Key points to consider:

- Minimise vegetation clearance for new development
- Exclude stock from existing areas of indigenous coastal vegetation
- Replant areas using locally-sourced genetic stock where appropriate
- Develop an ongoing management plan which includes weed and pest control
- Include opportunities for wetland management and creation

Undesirable example **Algies Bay, Mahurangi Peninsula, Auckland**

A lack of native vegetation along the coastal edge significantly reduces natural character and fails to buffer the surrounding environment from the buildings

Desirable example **Papamoa East, Tauranga**

By restoring native vegetation on the dunes in front of these houses, the natural character of the coast is being enhanced

BEST PRACTICE DESIGN ELEMENTS (continued)

MAINTAIN NATURAL COASTAL PROCESSES

Prevent changes to the natural patterns and movements of rivers, waves, tides, wind and rain as well as land, freshwater and marine plants and animals.

Key points to consider:

- Design and locate infrastructure (such as causeways, roads, boat ramps and seawalls) to minimise disruption to natural coastal processes
- Rehabilitate natural systems such as streams, wetlands, intertidal areas and dunes
- Prevent contaminated runoff and sediment flowing into the marine area
- Protect the movement and supply of marine sediments to beaches
- Avoid hard stabilisation structures along the coast

Undesirable example **Waihi Beach, Hauraki District**

This seawall disrupts the natural processes of the coastline, impacting on the natural movement of sediment and tides

Desirable example **Pauanui Beach, Thames-Coromandel District**

These houses and associated infrastructure have been set well back from the beach reducing the interruption to natural processes

BEST PRACTICE PLANNING ELEMENTS

Regional and district plans can include the following in order to preserve natural character within the coastal environment:

IDENTIFY AREAS WITH OUTSTANDING AND HIGH NATURAL CHARACTER

Identify areas within the coastal environment, including the marine environment for a regional plan, that have outstanding and high natural character and provide spatial information on these in appropriate planning documents.

Key points to consider:

- Identify areas with outstanding and high natural character on planning maps
- Provide freely available technical reports during plan consultation stages
- Consider natural character in land, freshwater and marine environments

Example

Northland Proposed Regional Policy Statement

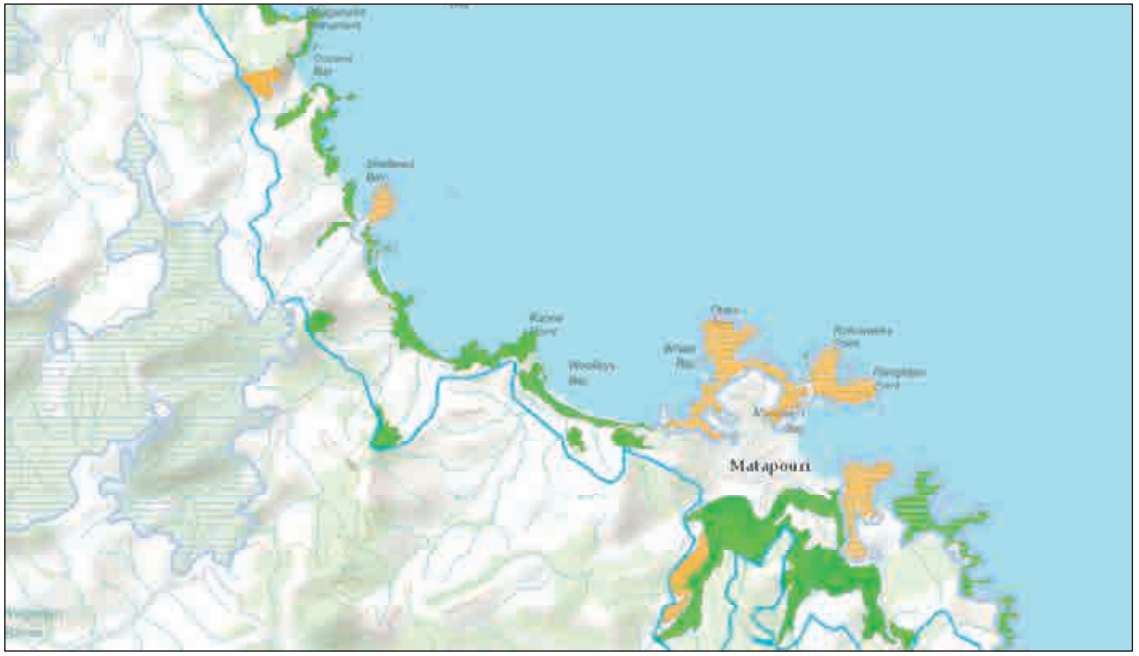
3.15 Protecting natural character, landscapes/features and historic heritage

The following natural and physical resources are identified using consistent approaches across Northland:

(a) High and outstanding natural character areas of the coastal environment and margins of freshwater bodies….

4.6.4 Method – Statutory plans and strategies

(1) Within two years of the Regional Policy Statement becoming operative or the first relevant plan change, whichever is the earlier, regional and district councils will incorporate within district and relevant regional plans: (a) The coastal environment, high and outstanding natural character within the coastal environment, and outstanding natural features and landscapes as shown in the Regional Policy Statement – Maps; and (b) Associated provisions to give effect to policies and methods in sections 4.7 and 4.8.



BEST PRACTICE PLANNING ELEMENTS (continued)

RESTRICT SUBDIVISION AND DEVELOPMENT IN AREAS WITH OUTSTANDING AND HIGH NATURAL CHARACTER

Policy 13 requires adverse effects to be avoided where there is outstanding natural character and significant adverse effects to be avoided on natural character elsewhere. Achieving this requires clear and robust policy and plan provisions.

Key points to consider:

- Avoid adverse effects on areas of outstanding natural character through applying the appropriate activity status to subdivision, development and other incompatible activities
- Use strategic planning to manage cumulative impacts on areas of high natural character through identifying areas where subdivision and development is inappropriate and where it will be provided for outside areas of high natural character
- Where development is inappropriate, include rules to ensure that it does not occur, such as through the use of prohibited status activity
- Include clear policies in regional policy statements identifying where areas of high and outstanding natural character are located and what activities need to be excluded from them

Motutapu Island, Hauraki Gulf

Example Draft Auckland Unitary Plan 4.3.6 Coastal zones

Draft Auckland Unitary Plan - March 2013

4.4.6.2 Outstanding Natural Landscapes (ONL) and Outstanding and High Natural Character (OHNC) coastal areas overlay

1. Activity table

The following table specifies the activity status of activities in the Outstanding Natural Landscapes and Outstanding and High Natural Character Area overlay.

Activity	High Natural Character	Outstanding Natural Landscape areas	Outstanding Natural Character
Development			
Buildings - no greater than the GFA in 4.4.6.2.2.1	P	P	P
Buildings - greater than the GFA in 4.4.6.2.2.1	RD	RD	NC
Buildings - greater than the GFA in 4.4.6.2.1 GFA where there is no practicable alternative location on a site for a building platform outside of the overlay area	RD	RD	NC
Buildings - greater than the GFA in 4.4.6.2.2.1 where there is a practicable alternative location for a building platform on a site outside of the overlay area	D	D	NC
Buildings - below MHWS	NC	NC	NC
Alterations and additions to buildings	P	P	P
Demolition of buildings or structures	P	P	P
Coastal			
Moorings	NC	NC	NC
Foreshore protection works	NC	NC	NC
Rural			
Production forestry - up to 2ha	P	P	NC
Production forestry - over 2ha	D	D	NC
Conservation forestry	P	P	P
Landfills and cleanfills	Pr	Pr	Pr

Note: For the land disturbance and vegetation management provisions that relate to this overlay refer to Part 4.2.3.9 - Land disturbance and Part 4.2.3.17 - Vegetation management.

2. Development controls

2.1 Gross Floor Area

Overlay	GFA
High Natural Character and Outstanding Natural Landscapes	50m²
Outstanding Natural Character	25m²

2.2 Height

1. The maximum height does not exceed 5m

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BEST PRACTICE PLANNING ELEMENTS (continued)

PROVIDE APPROPRIATE OBJECTIVES, POLICIES AND RULES TO ADDRESS IMPACTS ON OTHER NATURAL CHARACTER

Include objectives, policies and rules which manage the impact of activities on the natural character of other coastal areas.

Key points to consider:

- Prepare descriptions of the important natural character elements and features present within the various parts of the coastal environment within the region or district to guide assessments and decision-making
- Provide assessment criteria in the plan for discretionary activities to facilitate the consideration of natural character impacts during the resource consent process
- Require impacts on natural character to be addressed in the Assessment of Environmental Effects attached to resource consent applications
- Rules should restrict the density of development outside settlements within the coastal environment through providing for either very large lot sizes or clustering of smaller lots with a large balance lot
- Rules should ensure the appropriate location and design of any development which does occur on the coast. This is discussed further in Chapter 6
- Rules should address a wide range of activities affecting natural character including structures (such as houses, buildings, electricity and telecommunications lines, wind turbines, solar panels), earthworks, mineral extraction, intensive farming, subdivision, transport, commercial or industrial activities, vegetation clearance and marine-based activities

Example Draft Auckland Unitary Plan 4.4.9.12 Waitākere coastal settlements

2. Natural features and coastal environment

a. Subdivision design should:

   i. avoid the need for clearance of native vegetation

   ii. retain or link significant vegetation and fauna habitat areas

   iii. provide for the planting of native vegetation on the site

   iv. avoid development on natural landscape elements and heritage features

   v. minimise soil erosion.

b. Subdivision should encourage onsite water retention and use drainage methods that protect and enhance stream quality.

c. Subdivision should provide legal protection, and where appropriate, physical protection of native vegetation, such as fencing, to ensure these areas are protected in perpetuity.

Piha, Auckland

BEST PRACTICE PLANNING ELEMENTS (continued)

CONTROL DEVELOPMENT IN HIGHLY MODIFIED AREAS

Although coastal areas dominated by houses or other structures are not likely to be highly protected, they still require stronger restrictions on development than in non-coastal areas. This is in order to protect the remaining natural character that is present.

Example Bay of Plenty Regional Policy Statement Variation 1 Policy CE 2A

Preserve the natural character of the coastal environment and protect it from inappropriate subdivision, use and development by including provisions in regional and district plans to, and making decisions on resource consents which:…

(f) Encourag[e] efficient use of occupied space through intensification and clustering of developments, rather than sprawling, sporadic or unplanned patterns of settlement and urban growth;

Key points to consider:

- Provide greater setbacks from coastal boundaries
- Provide greater controls on earthworks
- Restrict site coverage and encourage the use of permeable paving
- Ensure stormwater is well managed and encourage the use of green infrastructure such as open swales and artificially constructed wetlands
- Ensure adequate supporting infrastructure including wastewater treatment to avoid overflows into the coastal environment
- Avoid stream channelisation and encourage restoration of riparian areas
- Protect trees, in particular indigenous coastal species and indigenous vegetation
- Encourage replanting of indigenous species
- Minimise private infrastructure on the coastal edge such as sea walls, steps, jetties and boat ramps
- Restrict domestic pets where native fauna is at risk
- Require clustering of houses supporting smaller, compact settlements

Ohope Beach, Whakatāne District

BEST PRACTICE PLANNING ELEMENTS (continued)

PROMOTE RESTORATION EFFORTS

Set objectives, policies and rules which promote restoration efforts in areas where natural character has been degraded and needs to be restored.

Key points to consider:

- Fence stock out of areas of indigenous vegetation and sensitive coastal systems such as riparian areas, the intertidal zone, dunes and wetlands
- Support the use of local genetic plant stock where practicable
- Provide for the restoration of dunes, riparian and intertidal margins
- Support the removal of redundant structures and materials (where appropriate under the Historic Places Act)

Example Nelson Operative Resource Management Plan - Part II Land Chapter 8 – Margins of Rivers, Lakes, Wetlands and the Coast

8.2.2 Objective - Maintenance and enhancement of the natural character of the margins of lakes, rivers, wetland and the coast, and the protection of that character from adverse effects of the subdivision, use, development or maintenance of land or other resources, including effects on landform, vegetation, habitats, ecosystems and natural processes.

8.2.3 Policies

8.2.3.17 - To pursue and encourage restoration and enhancement of coastal and riparian areas where natural character has been degraded by past human activities.

8.2.20 Methods of Implementation

8.2.20.1 - Regulatory - (j) Rules to control the effects of the location and bulk of buildings within 200 metres of the coast, including industrial buildings.

8.2.20.3 - Works and Services - (b) Restoration and enhancement of projects on coastal and riparian reserves and other public land, using local indigenous species.

8.2.20.4 - Advocacy and Education - (c) Preparation of a design guide for buildings in the coastal environment area

8.2.20.2 - Investigations and Monitoring - (c) Monitoring of extent and quality of indigenous coastal vegetation, rate of subdivision along coastline and number and type of enhancement projects.

Nelson, Tasman Bay

REFERENCES AND FURTHER READING

Board of Inquiry, 2009, *Proposed New Zealand Coastal Policy Statement (2008), Board of Inquiry report and recommendations, Volume 1: Findings, recommendations and recommended NZCPS*, Wellington

Department of Conservation, 2011, *Notes from natural character workshop*, 2 August, Wellington, available at http://www.doc.govt.nz/publications/conservation/marine-and-coastal/new-zealand-coastal-policy-statement/natural-character-and-the-new-zealand-coastal-policy-statement-2010-national-workshop/

Froude V, 2011, *Definitions of natural character*, v6, 26 Sept (unpublished)

Froude V, 2012, *Northland Regional Council Northland mapping project, natural character methodology report*, Pacific Eco-Logic Limited, Bay of Islands

Maplesden R and Boffa Miskell, 2000, *Natural character: Concept development in New Zealand law and planning*, Environment Waikato, Hamilton, available at www.ew.govt.nz

Peart R, 2005, *The community guide to coastal development under the Resource Management Act 1991*, Environmental Defence Society, Auckland

FOOTNOTES

1 *Eyre Eco-Park Ltd v Rodney District Council* EnvC Auckland A147/04

2 *Port Gore Marine Farms v Marlborough District Council* [2012] EnvC 72

3 Froude V, 2011

4 Froude V, 2012

5 *Federated Farmers of New Zealand Inc v Auckland Council* [2012] EnvC 174

Hokianga Harbour, Far North District

06 PROTECTING LANDSCAPE AND AMENITY VALUES

Karioitahi Beach, Auckland

IN THIS SECTION...

INTRODUCTION

Landscapes and amenity values play an important role in the overall well-being of a community. These values contribute to our quality of life and sense of place. Experiencing largely undeveloped landscapes enables people to get back in touch with nature and to refresh their minds and bodies. Undeveloped landscapes have important economic, social, cultural and ecological values that are not easily replaced.

Palmers Beach, Great Barrier Island

VISION

The RMA identifies the protection of outstanding natural features and landscapes as a matter of national importance. Objective 2 of the NZCPS 2010 sets out a vision for protecting landscape values on the coast. This has three main elements:

- Recognising the values attached to natural features and landscapes and identifying their spatial location
- Identifying subdivision, use and development which threatens these values and providing protection from them
- Restoring the coastal environment

Objective 2

To preserve the natural character of the coastal environment and protect natural features and landscape values through:

- recognising the characteristics and qualities that contribute to natural character, natural features and landscape values and their location and distribution;
- identifying those areas where various forms of subdivision, use, and development would be inappropriate and protecting them from such activities; and
- encouraging restoration of the coastal environment.

ISSUES

Development can have a negative impact on coastal landscapes and amenity through the intrusion of human-made structures and patterns into predominately natural areas. This has the effect of reducing the naturalness of coastal landscapes, something which is highly valued by the public. Coastal areas are particularly vulnerable to visual intrusion because development on the foreshore, skyline and headlands can be highly visible along long stretches of the coast.

Landscape values can be threatened by a range of different land uses and activities including:

- Buildings and structures which singly or cumulatively intrude into or dominate a natural or cultural landscape
- Infrastructure, including roads, driveways, pylons and transmission towers, which intrudes into and dominates natural landscapes
- Earthworks which modify landforms and which are visually intrusive through creating cuttings and filling
- Vegetation removal
- Monoculture forestry and other cultivation activities which introduce hard geometric lines and patterns into the landscape

Manganese Point, Whangarei District

POLICY

Defining landscape

The term "landscape" is not defined in the RMA or NZCPS 2010. The Environment Court has indicated that a precise definition of "landscape" under the RMA cannot be given but that elements of a working definition include:[1]

- Landscape involves both the natural and physical resources themselves and also the various factors relating to the viewer and their perception of the resources
- Landscape provides a linkage between individual natural and physical resources and the environment as a whole, through considering groups of resources together, and emphasising that our attitudes to these resources are affected by social, economic, aesthetic and cultural conditions

This definition acknowledges that landscape is not a single resource such as soils or vegetation. It is an integrative concept which is applied to a group of resources within a large spatial area and which incorporates the human values associated with them. Contemporary landscape practice (as confirmed by the Environment Court) describes landscape as having three sets of components:

- Biophysical or "natural science" characteristics
- The landscape's perceived or aesthetic values
- Its associational values (that are consistent with the landscape's natural state)

The RMA also places considerable weight on amenity values, allowing landscapes which are less than outstanding to be considered. The term "amenity values" is broadly defined in the Act to encompass "those natural and physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes".[2] Amenity values are also included as part of the definition of "environment".

As discussed in Chapter 5, although there is considerable overlap between the concepts of natural character and landscape, they are different. "Natural character" strongly emphasises natural ecological, hydrological and geomorphological processes, whereas "landscape" focuses more on the overall composition, spatial structure and coherence of an area.

Assessing landscape

Policy 15(c) provides specific guidance on the identification and assessment of natural features and landscapes in the coastal environment through having regard to a range of factors. These include natural science factors, aesthetic values, cultural and spiritual values and wild and scenic values. This indicates that the assessment of landscape is not just about aesthetics but it is very much about the values people ascribe to particular areas for a variety of reasons.

Policy 15(c): Natural features and natural landscapes

To protect the natural features and natural landscapes (including seascapes) of the coastal environment from inappropriate subdivision, use, and development: …

c. identifying and assessing the natural features and natural landscapes of the coastal environment of the region or district, at minimum by land typing, soil characterisation and landscape characterisation and having regard to:
   i. natural science factors, including geological, topographical, ecological and dynamic components;
   ii. the presence of water including in seas, lakes, rivers and streams;
   iii. legibility or expressiveness – how obviously the feature or landscape demonstrates its formative processes;
   iv. aesthetic values including memorability and naturalness;
   v. vegetation (native and exotic);
   vi. transient values, including presence of wildlife or other values at certain times of the day or year;
   vii. whether the values are shared and recognised;
   viii. cultural and spiritual values for tangata whenua, identified by working, as far as practicable, in accordance with tikanga Māori; including their expression as cultural landscapes and features;
   ix. historical and heritage associations; and
   x. wild or scenic values; …

A landscape will be considered outstanding under the RMA if it is "conspicuous, eminent, remarkable or iconic" within the context of the area concerned – the district if the assessment is being undertaken for a district plan and the region if it is for a regional policy statement or plan.[3] What is "natural" has been defined by the Environment Court as being something which is a "product of nature". It therefore can include

pasture and exotic tree species but not human-made structures. A landscape with structures may still have a degree of naturalness but it will be less "natural" than an unaltered landscape or a landscape without structures and with a lack of human influence.[4]

Amenity landscapes are more associated with local qualities and dynamics than outstanding landscapes and can include many of our "working" rural production landscapes. Landscapes with amenity value tend to have more to do with an area's unity and consistency of character than with how natural, endemic, structured or patterned it is.

Regardless of their underlying nature and related audiences, landscapes with amenity value have an existing character that is "glued together" by a certain cohesion of expression and unity of elements that gives rise to it being "pleasant" or "aesthetically cohesive" and having cultural or recreational appeal.

There are well established methods for identifying important landscapes. The Environment Court has adopted its own approach to landscape assessment under the RMA, which it is applying to landscape issues coming before the Environment Court. This is based on an approach taken to assessing regional landscapes in Canterbury during the 1990s, was further developed in an Environment Court case dealing with the impacts of aquaculture on the landscape at Banks Peninsula,[5] and has now largely been reflected in Policy 15 of the NZCPS 2010.

New Zealand landscape architects have generally focused on the identification of the broad characteristics that comprise different landscapes. However, recent landscape assessments have involved the identification of more subtle values such as geomorphology and ecology, particularly in the Auckland region where smaller features – some of which have been subject to historical modification – have been identified as outstanding.

Protection and management of landscapes

Section 6(b) of the RMA requires decision-makers to recognise and provide for "the protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development". Section 7 provides for particular regard to be given to "the maintenance and enhancement of amenity values". Provisions for the protection of landscapes and amenity values are also included in the Conservation Act 1987, Reserves Act 1977, National Parks Act 1980, and Queen Elizabeth the Second National Trust Act 1977.

Section 6(b) does not require that outstanding natural features and landscapes be preserved or protected at all costs, only that they be protected from "inappropriate subdivision, use and development". This must be considered within the general context of the RMA and the primary purpose of promoting sustainable management.[6]

Case law interpreting the RMA provides no clear guidance on what is "inappropriate subdivision, use and development" in outstanding natural coastal landscapes. Some district plans, such as the Queenstown-Lakes District Plan, have detailed assessment criteria to help determine what development may be appropriate in a particular landscape.

Where such assessment criteria are not provided, appropriateness is determined largely on a case by case basis through assessing the extent to which a proposed activity will impact on the values that have been identified as making the landscape outstanding in the first place. Environment Court decisions have indicated that outstanding natural landscapes are to receive a high level of protection from development.

Unlike outstanding natural landscapes which are to be protected, there is no presumption that landscapes which contribute to the amenity and environmental quality of local areas will be retained in their current state.[7] Change is to be carefully managed, however, to ensure that the overall amenity and environmental quality of the area is maintained or enhanced. This may include ensuring that areas of particular natural or cultural value and sensitive areas, such as ridgelines and headlands, are protected and that ecological "patches" and connective corridors, such as those along waterways and the coastline, are enhanced.

Policy 15 provides additional guidance on how landscapes in the coastal environment are to be managed:

- It directs councils to "avoid adverse effects" of activities on outstanding natural features and outstanding natural landscapes within the coastal environment
- Councils are to avoid "significant" adverse effects on all other natural features and natural landscapes in the coastal environment
- Outside of outstanding natural features and landscapes, and where adverse effects are not significant, councils must "avoid, remedy or mitigate" adverse effects on landscapes within the coastal environment

This means that landscapes in the coastal environment have higher protection under the law than those found elsewhere. It also means that the case law applying to coastal landscapes prior to the NZCPS 2010 coming

POLICY (continued)

into effect may not be fully applicable, with a higher standard of protection now required.

Policy 15: Natural features and natural landscapes

To protect the natural features and natural landscapes (including seascapes) of the coastal environment from inappropriate subdivision, use, and development:

a. avoid adverse effects of activities on outstanding natural features and outstanding natural landscapes in the coastal environment; and

b. avoid significant adverse effects and avoid, remedy, or mitigate other adverse effects of activities on other natural features and natural landscapes in the coastal environment;

including by: …

d. ensuring that regional policy statements, and plans, map or otherwise identify areas where the protection of natural features and natural landscapes requires objectives, policies and rules; and

e. including the objectives, policies and rules required by (d) in plans.

Policy 15(d) requires regional policy statements and plans to map or otherwise identify areas where natural features and natural landscapes require protection. Objectives, policies and rules are then to be included in the planning documents in order to provide such protection. At the time of writing the Department of Conservation implementation guidance on Policy 15 was still in development.

Parts of Policy 6, which is directed at activities in the coastal environment, are also highly relevant to landscape and amenity protection.

Policy 6(1): Activities in the coastal environment

1. In relation to the coastal environment: …

   c. encourage the consolidation of existing coastal settlements and urban areas where this will contribute to the avoidance or mitigation of sprawling or sporadic patterns of settlement and urban growth;

   d. consider where development that maintains the character of the existing built environment should be encouraged, and where development resulting in a change in character would be acceptable; …

   f. consider how adverse visual impacts of development can be avoided in areas sensitive to such effects, such as headlands and prominent ridgelines, and as far as practicable and reasonable apply controls or conditions to avoid those effects; …

   i. set back development from the coastal marine area and other water bodies, where practicable and reasonable, to protect the natural character, open space, public access and amenity values of the coastal environment; and …

The Department of Conservation guidance for implementing Policy 6 recognises that ribbon development in the coastal environment can be an inefficient use of coastal land compared to alternatives. Thus consolidation of activities is usually associated with better management of adverse environmental effects.[8] There is a clear direction from the implementation guidance that "plans can usefully identify where particular activities and forms of development are, or might be, appropriate and inappropriate".

This has a close link to Policy 7 which addresses strategic planning, including requiring plans to identify areas where various forms of subdivision, use and development would be inappropriate or may be inappropriate without the consideration of effects through a resource consent application. This policy also addresses the issue of cumulative effects from development, which is one of the main causes of the degradation of important landscape values. Where practicable, plans are to set thresholds in sensitive areas, which could take the form of zones, standards, targets or acceptable limits to change.

Sandspit area, Auckind

BEST PRACTICE DESIGN ELEMENTS

Coastal land development designed to protect landscape and amenity values can include the following elements:

AVOID BUILDINGS AND STRUCTURES IN OUTSTANDING AND SENSITIVE AREAS

Buildings or infrastructure should be located away from any outstanding natural landscapes or sensitive locations.

Key points to consider:

- Avoid placing buildings or infrastructure in outstanding natural landscapes or in nearby locations which impact on those landscapes
- Avoid building on significant hillsides, ridgelines, spurs, headlands and summits, particularly those landforms which are exposed to important public viewpoints
- Avoid important vistas
- Avoid culturally important areas
- Avoid buildings or structures which, either singly or cumulatively, dominate a natural landscape

Undesirable example **Long Beach, Oneroa Bay, Bay of Islands**

Large, obtrusive homes built on the ridgeline and extending down the cliff face have permanently impacted on the visual amenity of Long Beach

Desirable example **Whangaroa Harbour, Far North District**

By keeping the houses away from visually sensitive areas, and tucking them into the slope amongst indigenous vegetation, much of the visual amenity of this landscape has been retained

BEST PRACTICE DESIGN ELEMENTS (continued)

LOCATE AND DESIGN BUILDINGS TO REDUCE THEIR LANDSCAPE IMPACTS

Buildings should be designed to positively reinforce their landscape setting and visually integrate with the surroundings.

Key points to consider:

- Buildings, structures and infrastructure are sympathetic to and aligned with underlying landforms to minimise earthworks and avoid adverse visual effects
- Cluster buildings rather than scattering them throughout the landscape
- Break up the bulk of buildings
- Incorporate non-reflective materials and colours
- Use planting to help set the building within the landscape
- Design any fencing, planting and driveways to follow the natural contours, lines and patterns

Undesirable example Langs Beach, Whangarei District

Buildings that have a large bulk, use highly reflective colours, and have little surrounding landscaping, can have a significant impact on landscape values

Desirable example Moturoa Island, Bay of Islands

By breaking up the bulk and location of buildings, and nestling them into the surrounding vegetation, landscape impacts can be reduced

BEST PRACTICE DESIGN ELEMENTS (continued)

SET, RETAIN AND RESTORE GENEROUS SETBACKS

Provide generous setbacks to ensure that buildings and structures are located away from the coastal edge or margins of important landscape areas.

Key points to consider:

- Locate buildings well back from the foreshore edges
- Maintain existing natural buffers including landforms such as dunes and vegetation
- Incorporate screening planting along riparian margins

Undesirable example

Early development at Matarangi, Thames-Coromandel District

The lack of coastal setbacks in the early development at Matarangi has reduced the landscape values along this stretch of coast, with houses dominating the beachfront

Desirable example

Recent development at Matarangi, Thames-Coromandel District

More recent development along this coastline has been kept well back from the beach which has helped better protect landscape and amenity values

BEST PRACTICE DESIGN ELEMENTS (continued)

RESTORE NATURAL VEGETATION AND SYSTEMS

Restore natural vegetation and systems to increase landscape and amenity values.

Key points to consider:

- Replant the site with indigenous vegetation
- Restore riparian areas
- Reinstate wetlands and natural waterways
- Use locally-sourced native plant species
- Provide for ongoing weed and pest animal management as required

Undesirable example Opononi, Hokianga Harbour, Far North District

A lack of indigenous coastal vegetation detracts from the amenity of this coastal settlement

Desirable example Whisper Cover, Snells Beach, Auckland

Incorporating waterways with native vegetation into this development has increased the amenity values as well as reduced contaminated runoff

BEST PRACTICE DESIGN ELEMENTS (continued)

PERMANENTLY PROTECT VALUABLE LANDSCAPE AND AMENITY AREAS

Permanently protect areas with high landscape or visual amenity from future development

Key points to consider:

- Design development to avoid areas with high landscape and amenity values
- Covenant land titles to protect important areas in perpetuity

Undesirable example
Paku, Tairua, Thames-Coromandel District

The headland was not protected, and this very visually prominent feature has now been developed, significantly reducing the landscape values of the beach and estuary

Desirable example
Terakihi Peninsula, Mountain Landing, Bay of Islands

The land covenanted at the Terakihi Peninsula as part of this development ensures the protection of this important landscape

BEST PRACTICE PLANNING ELEMENTS

Regional and district plans can include the following in order to preserve outstanding natural landscapes and amenity values:

IDENTIFY OUTSTANDING NATURAL COASTAL LANDSCAPES AND AMENITY VALUES

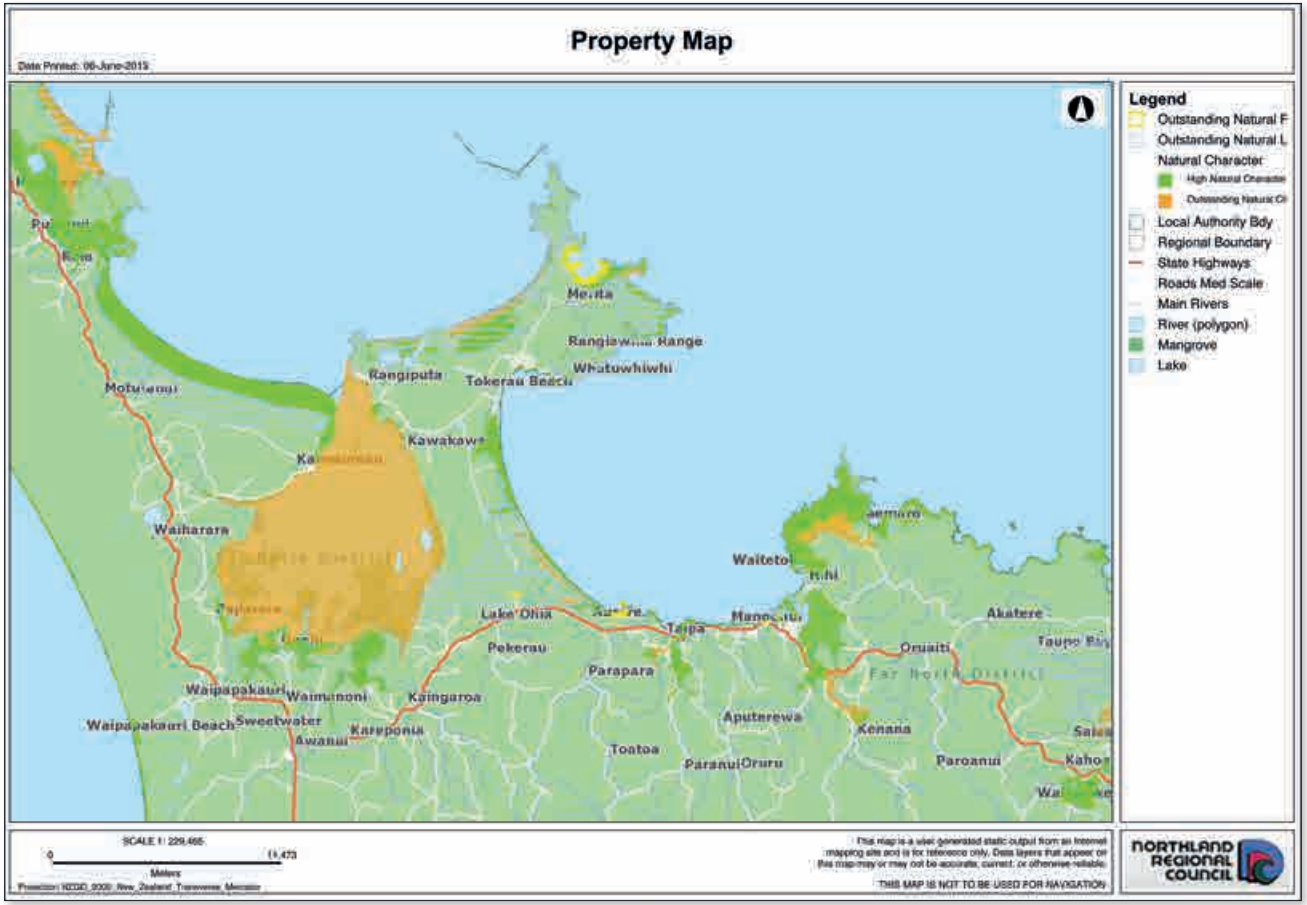
Local authorities should identify and describe areas of outstanding natural coastal landscapes and other coastal areas of amenity value.

Key points to consider:

- Identify outstanding and amenity areas on planning maps
- Provide a detailed description of the values which make each of these areas important
- Provide freely available technical reports during plan consultation
- Identify which values the plan seeks to protect in the future

Example Northland Proposed Regional Policy Statement

Included in the Proposed Regional Policy Statement for Northland is a set of proposed maps which show Northland's 'outstanding' areas. Whilst there is a legal requirement to identify these areas, the Northland Regional Council believes this will also lead to "better protection for the places that matter to Northlanders and ensure appropriate protection of these areas".[9] Draft maps were initially developed based on legal criteria, data from a range of sources and extensive field work. Affected landowners were then consulted to help refine the areas identified.



BEST PRACTICE PLANNING ELEMENTS (continued)

DEVELOP APPROPRIATE OBJECTIVES AND POLICIES TO PROTECT LANDSCAPE AND AMENITY VALUES

Protecting landscapes and amenity values from inappropriate activities will help retain coastal values of importance to the community.

Key points to consider:

- Clearly state the future desired outcome for each landscape or landscape type
- Provide sufficient detail to make it clear which activities are likely to be inappropriate
- Policies should make it clear how future outcomes will be achieved, including what effects should be avoided within specific landscape areas and how this will be achieved
- Methods should provide incentives for voluntary action to protect and enhance landscape areas, such as covenanting land against future subdivision, fencing areas of indigenous vegetation, replanting indigenous vegetation, protecting riparian margins and protecting heritage sites.
- Plans must indicate how the effectiveness of the plan in protecting valued landscapes will be monitored and how plan provisions will be reviewed in light of monitoring

Example Proposed Hauraki District Plan (November 2012)

6.3 Protection of outstanding natural features and landscapes and district amenity landscapes

6.3.3 Objectives and Policies

(1) Objective 1

Protect the integrity and the aesthetic, cultural and intrinsic values of outstanding natural features and landscapes and the high cultural and visual amenity values of significant natural features and landscapes of District significance.

(a) Policies

Objective 1 will be achieved by the implementation of the following policies:

(i) Control the subdivision, use and development of land so that the adverse effects on aesthetic and intrinsic values and on the visual and physical integrity of outstanding landscapes and natural features, and landscapes of District significance, are avoided, remedied or mitigated.

(ii) To maintain as far as practicable, the elements, features and patterns that contribute to the quality of significant natural features and landscapes.

(iii) To ensure the significant natural coastal environment features and coastal environment landscapes are preserved and protected from inappropriate subdivision, use and development.

(iv) To encourage and provide for appropriate development which will remedy or mitigate the adverse effects of past land uses and enhance the natural character and amenity values of the coastal environment.

(v) To promote the restoration and enhancement of existing degraded natural features and landscapes.

Whiritoa, Hauraki District

BEST PRACTICE PLANNING ELEMENTS (continued)

DEVELOP RULES AND CONSENT CONDITIONS TO CONTROL COASTAL SUBDIVISION

Provide appropriate rules and conditions of consent to control the impact of coastal subdivision and development on landscape and amenity values.

Key points to consider:

- Exclude all development with adverse effects from outstanding natural landscapes
- Control the adverse effects of development on other natural landscapes (such as by excluding activities from sensitive areas including headlands and prominent ridgelines and ensuring activities are integrated into the landscape by controlling aspects like design, colour, location, landscaping, vegetation clearance and earthworks)
- Rules should also address the cumulative impacts of activities; it is important that subdivision and density of buildings are adequately controlled
- Require buffer zones to maintain some distance between the important sites and the works being undertaken
- Identify where certain activities will be inappropriate (and apply prohibited or non-complying status) and clearly state that such activities will be contrary to the objectives and policies of the plan
- Identify where certain activities may be inappropriate without consideration of effects through a consent process (and apply non-complying or discretionary status)

Example Auckland City – District Plan Hauraki Gulf Islands Section – Operative 1996

Part 8 – Subdivision 8.6.1 Assessment criteria for discretionary activity applications

(c) Lot Design and Layout

iv) The likely location of buildings and access to them shall minimise potential visual impacts.

v) The location of building platforms on lots adjoining the coastline shall avoid the need for coastal protection works.

(k) Protection of Vegetation and Landscape

i) The size and shape of lots shall maximise the protection of indigenous vegetation and avoid directing development towards areas prone to erosion; and

ii) The proposed subdivision shall maximise the use of areas that are already cleared for vehicle access and building sites. Areas where the natural ecology is still intact, or partly intact shall be conserved where this is practicable and reasonable in the context of the character of the site subject to any application.

iii) The subdivision shall provide for ecological restoration and enhancement, where appropriate ecological enhancement may include enhancement of existing native vegetation replanting and weed and pest control.

Waiheke Island, Hauraki Gulf

BEST PRACTICE PLANNING ELEMENTS (continued)

DEVELOP RULES WHICH SUFFICIENTLY CONTROL LANDSCAPE IMPACTS ARISING FROM DEVELOPMENTS

Provide appropriate rules and conditions of consent to control the impact of individual development proposals on landscape and amenity values.

Key points to consider:

- Require adequate setbacks for coastal development and subdivision from the coast
- Relocate existing structures (roads and infrastructure) away from the coastal edge
- Control the location of structures, including avoiding visually prominent sites such as headlands and ridgelines
- Control design of structures including stepping or breaking up buildings into several smaller blocks, wings, or components to help reduce the bulk and scale of any structure or building
- Incorporate non-reflective materials and colours that relate to the hues of local vegetation, rocks, clays and beaches
- Require development to protect and appropriately respond to the open space, character and patterns of the landscape
- Control extent and type of vegetation clearance
- Impose covenants and require the provision of esplanade reserves, strips or reserve contributions
- Impose a requirement to rehabilitate a site through planting after completion of the works

Example Far North District Plan Chapter 12 – Natural and Physical Resources, Section 7 – Lakes, Rivers, Wetlands and the Coastline

Rule 12.7.6.1.1 Setback from lakes, rivers and the coastal marine area

Any building and any impermeable surface must be set back from the boundary of …. the coastal marine area, … The setback shall be:

(a) a minimum of 30m in the Rural Production, Waimate North, Rural Living, Minerals, Recreational Activities, Conservation, General Coastal, South Kerikeri Inlet and Coastal Living Zones;

(b) a minimum of 26m in the Residential, Coastal Residential and Russell Township Zones;

(c) a minimum of 20m in the Commercial and Industrial Zones.

Matai Bay, Far North District

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Quality Planning Website http://www.qualityplanning.org.nz/plan-topics/landscapes.php

FOOTNOTES

1 *Wakatipu Environmental Society Inc and ors v Queenstown-Lakes District Council* [2000] NZRMA 59, paragraphs 77 and 78

2 section 2

3 *Wakatipu Environmental Society Inc and ors v Queenstown-Lakes District Council* [2000] NZRMA 59, paragraphs 82 to 85

4 ibid, paragraphs 88 and 89

5 *Pigeon Bay Aquaculture Ltd v Canterbury Regional Council* [1999] NZRMA 209

6 section 5

7 *Wakatipu Environmental Society Inc and ors v Queenstown-Lakes District Council* [2000] paragraph 91

8 http://www.doc.govt.nz/Documents/conservation/marine-and-coastal/coastal-management/guidance/policy-6.pdf

9 http://www.nrc.govt.nz/newrps

South Coast, Wellington

07

ADDRESSING SEDIMENTATION AND POLLUTION

Snells Beach, Auckland

IN THIS SECTION...

INTRODUCTION

Coastal land development has had a significant impact on the quality of coastal waters through increasing sediment and pollutants flowing into the ocean. Early Māori burnt areas of coastal forest and established agriculture around coastal plains. Sediment cores demonstrate that this caused increased amounts of silt and mud to accumulate in estuaries and harbours. Further vegetation clearance, significant changes in land use and rapid modification of coastlines following European settlement, have exponentially increased soil erosion and sediment accumulation rates in many New Zealand estuaries.

In the mid-1900s a large proportion of sewage was being discharged untreated into the sea or waterways in New Zealand. Most of what was treated, only received primary treatment, which simply involved removing solids before discharge. By the 1970s untreated discharges had almost halved. In 1991 the RMA was enacted resulting in tighter controls on point source discharges, but diffuse discharges still remain a challenge.[1]

There is likely to be continued deterioration of coastal water quality, even without new development, if remedial action is not taken. This is because the legacy of past activities has resulted in the accumulation of pollutants and nutrients in soils. Sediment often still contains materials now banned, such as DDT, tin from antifouling and lead from petrol. Coastal works that involve disturbing these sediments can redistribute the pollutants.

Kawakawa Bay, Auckland

VISION

In recent years sedimentation, in particular, and pollution have been recognised as a major concern for the coastal environment and its biodiversity. Degradation of water quality, and the subsequent impact on coastal ecosystems, has resulted from both rural and urban point and non-point sources. The vision of the NZCPS 2010, as set out in Objective 1, is to maintain coastal water quality and enhance it where it has deteriorated as a result of human activity.

Objective 1

To safeguard the integrity, form, functioning and resilience of the coastal environment and sustain its ecosystems, including marine and intertidal areas, estuaries, dunes and land, by:

- maintaining or enhancing natural biological and physical processes in the coastal environment and recognising their dynamic, complex and interdependent nature;
- protecting representative or significant natural ecosystems and sites of biological importance and maintaining the diversity of New Zealand's indigenous coastal flora and fauna; and
- maintaining coastal water quality, and enhancing it where it has deteriorated from what would otherwise be its natural condition, with significant adverse effects on ecology and habitat, because of discharges associated with human activity.

Achieving this will require baseline analysis, an understanding of any trends in water quality through good monitoring, and knowledge of the activities that impact on them. In addition, there is now a clear expectation that action will be taken to minimise the discharge of sediment and pollutants from diffuse sources on land and marine-based activities. Councils will need to ensure that the background information used to inform their plan provisions, recognises that water bodies are interlinked, and that coastal water quality is often determined by activities and discharges further up the catchment.

ISSUES

Land and marine-based activities can result in a number of key impacts on the coastal environment:

- Vegetation clearance (including that from forestry harvesting), overgrazing, intensive pastoral land uses, poor riparian management and earthworks (both urban and rural) can increase the amount of sediment and other contaminants flowing into the ocean
- Increasing the amount of land covered with hard surfaces can result in less infiltration and greater runoff within a catchment. This, in turn, can lead to greater erosion of stream channels and a consequent increase in the amount of sediment discharged into the sea
- Urban infrastructure, including stormwater and sewage reticulation systems, will often involve discharges to the coastal marine area. These discharges can be particularly challenging to manage in extreme rainfall or other emergency situations
- Many contaminants adhere to sediments, particularly the finer particles. Through a combination of physical factors (discharging into calm settling zones) and chemical processes (higher salinity causing fine particles to flocculate and settle) there is an accumulation of contaminated sediment in estuaries
- Marine works, such as dredging and dumping, can result in the re-suspension of sediment from the sea floor

Bell Island Sewage Treatment Plant, Nelson

ISSUES (continued)

Suspended sediment is thought to be the main cause of reduced water clarity in coastal areas. The discharge of sediment into the marine area can have profound effects on marine ecosystems through a number of changes, including:

- Altering habitats on the sea floor
- Smothering bottom-living organisms
- Clogging the gills of filter feeders
- Reducing the clarity of the water
- Poisoning marine life where sediments carry toxins

Discharges of sewage and polluted stormwater increase the nutrients and pollutants in seawater and marine sediments. Sewage is a significant source of nutrients flowing into many harbours and coastal areas adjacent to settlements through:

- Inadequate treatment of sewage before it is discharged into the marine area
- Leakages and overflows from sewerage treatment systems spilling into stormwater drains and ultimately into the sea; these events will often increase in extreme rainfall events
- The failure of irrigation systems from on-site sewerage treatment — often those connected to septic tanks

High levels of fertiliser use on rural land, and intensive farming, can also result in elevated levels of nutrients entering the marine area. This occurs particularly with dairy farming, but also with intensive (irrigated) cropping, horticulture and sheep and beef farming. High nutrient levels can result in the rampant growth of nuisance seaweeds and bottom algal growths which smother other marine life, and can exacerbate blooms of suspended algae. Algal blooms can reduce water clarity and in some cases can produce toxins which variously kill fish, render the water unfit for human contact, make shellfish toxic and even affect people on land when there is an onshore wind.

Development which significantly increases road traffic can have negative effects on the marine environment. This is especially the case in the Auckland region where traffic volumes are particularly heavy. Many heavy metals accumulating in marine sediments in the upper Waitematā harbour are derived from motor vehicles. Lead, zinc, copper and polycyclic aromatic hydrocarbons originating from the vehicles and their fuel, become deposited on roads, and then wash into waterways.

Runoff from unpainted iron roofs can also be a major source of zinc in marine areas. Boatyards and boat antifouling can generate pollutants and toxic substances which end up in coastal waters, as can oily discharges from boats. There are regional differences throughout the country in the contaminants found in the marine area and historic contamination is a major source of heavy metals in some locations.

Coastal Earthworks, Bay of Plenty

Forestry harvesting, East Cape

POLICY

Most of the issues associated with degradation of marine water quality are the result of land use and discharges within catchments, meaning that coastal water quality is primarily managed through provisions in regional plans applied above mean high water springs and through the resource consent process. The RMA provides that no person may discharge any contaminant into water unless the discharge is expressly allowed by a rule in a regional plan or by a resource consent.[2] A regional council can only allow such a discharge, as a permitted activity in a regional plan, if it is satisfied that the discharge will not have any significant adverse effects on aquatic life, amongst other things.

Although these provisions enable good control to be exercised over point-source discharges into the sea, it is more difficult to address diffuse non-point discharges, where contaminants and sediment wash off the land and end up in the marine area. In some cases it is possible to reduce the generation of contaminants at their source, through adopting low impact design, or painting galvanised roofs to minimise discharges of zinc. In other cases discharges require controls over earthworks, land clearance and land management activities. This may include the adoption of treatment techniques and stormwater detention ponds. There are challenges in obtaining good information on which to base management responses, for example, through quantifying contributions from different sources and understanding how contaminants behave in the coastal marine area. Hydrodynamic modelling may be required and can be costly.

Enhancement of water quality

Policy 21 of the NZCPS 2010 addresses enhancement of water quality in the coastal environment and includes the following directions to regional councils:

- "Priority" is to be given to improving the quality of water where it is having a significant adverse effect on ecosystems, natural habitats, or water-based recreational activities, or is restricting existing uses such as shellfish gathering
- Such areas of coastal water and water bodies are to be identified and included in regional plans
- Provisions should be included in regional plans to improve water quality in the areas identified above. Water quality should be restored at least to a state that can support activities, ecosystems and natural habitats, where practicable
- Stock must be excluded from the coastal marine area, adjoining intertidal areas and other water bodies and riparian margins in the coastal environment, within a prescribed time frame

Policy 21: Enhancement of water quality

Where the quality of water in the coastal environment has deteriorated so that it is having a significant adverse effect on ecosystems, natural habitats, or water-based recreational activities, or is restricting existing uses, such as aquaculture, shellfish gathering, and cultural activities, give priority to improving that quality by:

a. identifying such areas of coastal water and water bodies and including them in plans;

b. including provisions in plans to address improving water quality in the areas identified above;

c. where practicable, restoring water quality to at least a state that can support such activities and ecosystems and natural habitats;

d. requiring that stock are excluded from the coastal marine area, adjoining intertidal areas and other water bodies and riparian margins in the coastal environment, within a prescribed time frame; and

e. engaging with tangata whenua to identify areas of coastal waters where they have particular interest, for example in cultural sites, wāhi tapu, other taonga, and values such as mauri, and remedying, or, where remediation is not practicable, mitigating adverse effects on these areas and values.

The *Australian and New Zealand guidelines for fresh and marine water quality* promulgate a water quality management framework that could be useful for the purpose of implementing Policy 21. These guidelines provide an important reference for water quality management in New Zealand, particularly in regard

Te Kouma Harbour, Thames-Coromandel District

to toxic contaminants. They offer methods for setting limits on pollutant concentrations in freshwater, coastal and marine environments.[3]

Managing sedimentation

The effects of sediment discharges (such as turbidity and sedimentation), either as a result of land-based or coastal activities, have been identified as one of the most serious threats to the integrity of New Zealand's estuarine and coastal ecosystems.[4] Further information on suspended sediments and their impact on the marine environment can be found in the EDS guides *Treasuring our biodiversity* and *Managing the marine environment*. Policy 22 of the NZCPS 2010 addresses sedimentation in the coastal environment. Activities will not need to actually be in the coastal environment to be potentially relevant to the implementation of Policy 22. For example, a major inland roading project involving large-scale earthworks may be of concern where waterways lead to the coastal marine area.

Policy 22: Sedimentation

1. Assess and monitor sedimentation levels and impacts on the coastal environment.
2. Require that subdivision, use, or development will not result in a significant increase in sedimentation in the coastal marine area, or other coastal water.
3. Control the impacts of vegetation removal on sedimentation including the impacts of harvesting plantation forestry.
4. Reduce sediment loadings in runoff and in stormwater systems through controls on land use activities.

Policy 22 requires councils to:

- Assess the current levels of sedimentation in coastal waterways and the marine area
- Identify the likely environmental impacts of current sedimentation levels
- Monitor changes in sedimentation levels and impacts
- Ensure that there is no significant increase in sedimentation in coastal waterways and the marine area
- Control the impacts of forestry harvesting on sedimentation as well as other vegetation removal
- Control land use activities to reduce sediment loadings in runoff and stormwater systems

Reducing the discharge of contaminants

The discharge of contaminants into the coastal marine environment is a key issue for addressing coastal pollution and enhancing coastal water quality. Policy 14 recognises that in order to restore the natural character of the coastal environment there is a need to reduce or eliminate discharges of contaminants. Policy 23 deals with this topic directly and includes a comprehensive list of matters that councils must have regard to. This particular policy arose from the recommendation of the Board of Inquiry that water quality policies be strengthened. This was to ensure that decision-makers who are considering discharges to water in the coastal environment have proper regard to how to prevent or minimise adverse effects, particularly on ecosystems, habitats and the life-supporting capacity of water.[5]

Policy 23 provides clear direction that discharges of untreated human sewage into coastal water should not be occurring. In addition, the discharge of treated sewage into the coastal environment should only be permitted where there has been adequate consideration of alternatives and the effects on tangata whenua values have been understood and considered. There must also be early and meaningful consultation with tangata whenua when developing plan provisions which provide for such activity.

Policy 23(4) sets out what local authorities need to be doing to effectively manage stormwater discharges. This includes:

- Adopting an integrated catchment management approach which links the management of stormwater networks with that of other activities within the catchment
- Reducing contaminant and sediment loadings at their source, through such actions as placing controls on land use activities, adopting good design, and requiring stormwater treatment
- Addressing cross contamination between stormwater and sewage systems

Whisper Cove, Snells Beach, Auckland

Policy 23: Discharge of contaminants

1. In managing discharges to water in the coastal environment, have particular regard to:
    a. the sensitivity of the receiving environment;
    b. the nature of the contaminants to be discharged, the particular concentration of contaminants needed to achieve the required water quality in the receiving environment, and the risks if that concentration of contaminants is exceeded; and
    c. the capacity of the receiving environment to assimilate the contaminants; and:
    d. avoid significant adverse effects on ecosystems and habitats after reasonable mixing;
    e. use the smallest mixing zone necessary to achieve the required water quality in the receiving environment; and
    f. minimise adverse effects on the life-supporting capacity of water within a mixing zone.
2. In managing discharge of human sewage, do not allow:
    a. discharge of human sewage directly to water in the coastal environment without treatment; and
    b. the discharge of treated human sewage to water in the coastal environment, unless:
        i. there has been adequate consideration of alternative methods, sites and routes for undertaking the discharge; and
        ii. informed by an understanding of tangata whenua values and the effects on them.
3. Objectives, policies and rules in plans which provide for the discharge of treated human sewage into waters of the coastal environment must have been subject to early and meaningful consultation with tangata whenua.
4. In managing discharges of stormwater take steps to avoid adverse effects of stormwater discharge to water in the coastal environment, on a catchment by catchment basis, by:
    a. avoiding where practicable and otherwise remedying cross contamination of sewage and stormwater systems;
    b. reducing contaminant and sediment loadings in stormwater at source, through contaminant treatment and by controls on land use activities;
    c. promoting integrated management of catchments and stormwater networks; and
    d. promoting design options that reduce flows to stormwater reticulation systems at source.
5. In managing discharges from ports and other marine facilities:
    a. require operators of ports and other marine facilities to take all practicable steps to avoid contamination of coastal waters, substrate, ecosystems and habitats that is more than minor;
    b. require that the disturbance or relocation of contaminated seabed material, other than by the movement of vessels, and the dumping or storage of dredged material does not result in significant adverse effects on water quality or the seabed, substrate, ecosystems or habitats;
    c. require operators of ports, marinas and other relevant marine facilities to provide for the collection of sewage and waste from vessels, and for residues from vessel maintenance to be safely contained and disposed of; and
    d. consider the need for facilities for the collection of sewage and other wastes for recreational and commercial boating.

The Department of Conservation has prepared some brief guidance on implementing Policy 23. This makes it clear that when considering the discharge of treated sewerage into the coastal environment, councils will need to consider the location, frequency, duration, volume, level of treatment and the extent to which the discharge is the best practicable option (within a relevant timeframe).[6] The guidance also states that Policy 23 needs to be considered together with objectives and other policies in the NZCPS 2010 which address issues of discharge, water quality and infrastructure, giving a more holistic approach to addressing this issue.

BEST PRACTICE DESIGN ELEMENTS

The level of attention to sedimentation and other water-borne pollutants should be influenced by the significance of likely effects, including consideration of such matters as the scale of the project and sensitivity of the receiving environment. Development designed to address sedimentation and pollution can include the following elements:

INCORPORATE SEDIMENT RETENTION MECHANISMS INTO EARTHWORKS

Undertake earthworks in the dry season and incorporate sediment generation limitation and retention mechanisms.

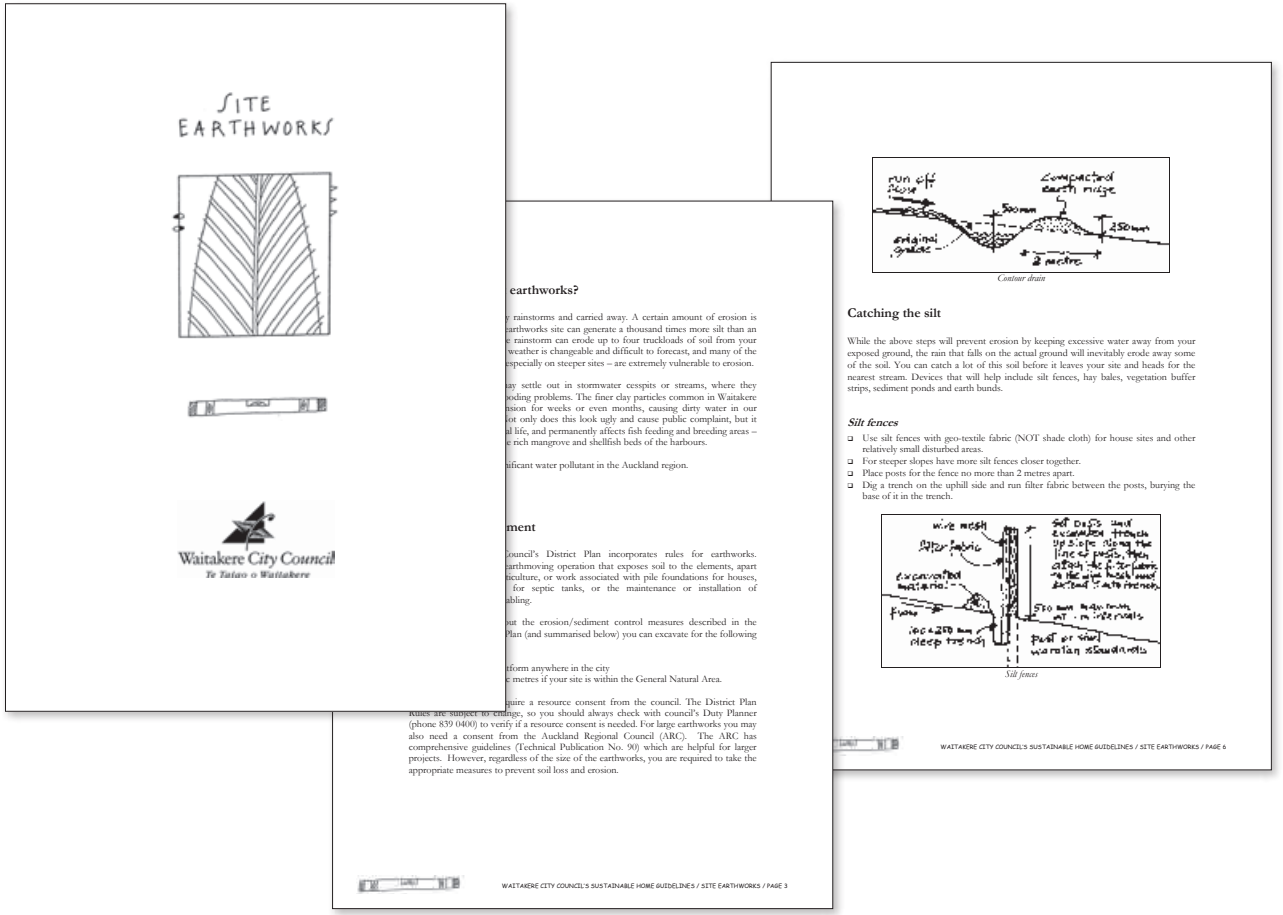
Key points to consider:

- Minimise earthworks and disruption to vegetation cover and soils
- Work within the natural contours of the site rather than modifying it
- If possible, carry out earthworks during the summer
- Avoid erosion by diverting surface water away by using runoff diversion channels, contour drains or earth bunds
- Put in place silt control measures such as silt fences, hay bales, vegetation buffer strips, sediment ponds and earth bunds
- Include a generous riparian buffer around waterways
- Avoid works which involve the disturbance of sediments known to be contaminated
- For large projects, stage works to reduce soil exposure at any one time

Desirable example

Auckland Council (former Waitākere City Council) Sustainable Home Guidelines Site Earthworks

available at http://www.waitakere.govt.nz/abtcit/ec/bldsus/pdf/sustainabledesign/siteearthwrks.pdf



BEST PRACTICE DESIGN ELEMENTS (continued)

CONSIDER USE OF FORWARD PLANNING AND CUTTING EDGE TECHNOLOGIES

There are a range of treatment devices that can be used, including swales, filters and infiltration devices such as rain gardens. Further advice and guidance can be found in the Auckland Council's Technical Publication TP10 – *Design guideline manual stormwater treatment devices*.[7]

Key points to consider:

- Use on-site sewerage treatment and disposal systems that reduce nutrients
- Locate on adequate lot sizes to allow proper infiltration
- A "treatment train" approach incorporating one or many treatment devices in a series can provide an optimal solution. This approach depends on the nature of the contaminant to be removed and site constraints, such as available land
- Use low-flow, water-efficient appliances and fittings to minimise water use and sewage generation. This is particularly important where land disposal is proposed
- Incorporate community sewerage schemes which are designed to high standards with overflows and treatment options

Desirable example Wynyard Quarter, Auckland Waterfront

Wetlands and indigenous plantings have been created to assist with the filtration of stormwater in a highly modified environment

BEST PRACTICE DESIGN ELEMENTS (continued)

REDUCE RUNOFF FROM URBAN ACTIVITIES

Design developments to ensure hard surfaces are reduced and hydraulic neutrality is provided (so that the increase in stormwater runoff due to hard areas, such as pavements and buildings, does not exceed the rate of runoff). For buildings and structures, include the provision of riparian margins and generous setbacks from the coastal edge.

Key points to consider:

- Locate buildings well back from the foreshore edges
- Maintain existing natural vegetation and landform buffers
- Incorporate planting along riparian margins
- Minimise hard surfaces and increase green areas
- Ensure no more runoff and no faster than in the prior conditions
- Use attenuating water tanks
- Use natural soakage and drainage patterns
- Use newly-created wetlands rather than existing wetlands for water treatment
- Use swales and green areas rather than hard channelling
- Incorporate rain gardens
- Include mid-catchment ponds

Undesirable example **Leith River, Dunedin** Hard channelling and lack of riparian planting increases sediment and pollutants reaching the marine environment

Desirable example **Project Twin Streams, Auckland** By providing a system of riparian areas and plantings, urban stormwater can be more effectively filtered before it reaches the coast

BEST PRACTICE DESIGN ELEMENTS (continued)

REDUCE RUNOFF FROM AGRICULTURAL ACTIVITIES

Incorporate mechanisms that reduce the runoff produced by agricultural activities.

Key points to consider:

- Prevent stock from accessing waterways and the coastal edge
- Have adequate farm treatment systems to cope with the volume and strength of effluent produced and discourage over-stocking
- Create riparian buffer zones using native flora
- Construct runoff management systems such as wetlands or pools along subsurface farm drains
- Restore old wetlands to create natural obstacles to sediment runoff
- Construct farm tracks on sites where gradients are low
- Optimise fertiliser application such that nutrient discharges are minimised
- Develop Farm Management Plans to minimise nutrient discharge with practices such as optimising stocking rates, moving stock to "winter runoffs" to "spell" pasture in more nutrient discharge prone areas, or using feed pads with effluent treatment facilities.

Desirable example **Manawatu-Wanganui Guide to Managing Farm Dairy Effluent**

The council has published a useful guide which offers advice and information on ways to reduce runoff from agricultural activities

BEST PRACTICE DESIGN ELEMENTS (continued)

REDUCE RUNOFF FROM FORESTRY ACTIVITIES

Incorporate mechanisms that reduce the runoff produced by forestry activities. Further advice and guidance can be found in Auckland Council's Technical Publication TP90 – *Erosion and sediment control guidelines for land disturbing activities in the Auckland Region*[8] and TP223 - *Forestry operations in the Auckland Region: A guideline for erosion and sediment control*.[9]

Key points to consider:

- Undertake tree felling and track construction in plantation forests so that a riparian buffer and coastal margin is retained to protect the catchment from sedimentation
- Install cut-off drains at regular intervals on tracks so that water runoff can be managed and directed away from waterways
- Avoid felling and track construction during high rainfall periods
- Use sediment control measures when harvesting trees on steep or erodible slopes
- Maintain riparian buffer zones along waterways and coastal edges to prevent large amounts of sediment from entering the coastal area
- Avoid highly invasive mechanical and burning techniques to clear land with high erosion potential

Desirable example Auckland Region

A guideline to erosion and sediment control clearly illustrates best practice methods which can be applied to forestry

Forestry Operations in the Auckland Region
A Guideline for Erosion and Sediment Control

September 2007 TP223

Auckland Regional Council
Technical Publication No. 223, September 2007
ISSN 1175-205X
ISBN -10 : 1–877416–76–2
-13 : 978–1–877416–76–7

Specific Applications of Erosion & Sediment Control 92

TP223 - Forestry operations in the Auckland region

9.2 Landing Sites

Landings may be permanent or temporary formations. They are generally constructed 12 to 18 months prior to harvesting and must be well drained and stable with appropriate erosion and sediment controls in place.

The construction of landings can require significant earthworking with the potential to generate large volumes of sediment from rainfall events. Therefore, all sediment-laden flows should be directed to sediment treatment measures prior to discharge from the landing. The site may require shaping or a diversion channel/bund installed to direct the flows to one or more control systems. Furthermore, the cumulative impacts of many landing sites within a single forest, if constructed without appropriate erosion and sediment control, can potentially create a significant adverse effect on watercourses.

Hard, compacted surfaces such as landings can be left unstabilised for varying timeframes provided the appropriate erosion and sediment controls are installed and any necessary approval (resource consent and/or winter works extension) from the ARC has been obtained. Any loose soil should be stabilised with grass seed, mulch, slash etc. An example of a landing site that was constructed during the earthworks season and not used for harvesting immediately after construction is outlined in Photo 9.2.

Landing Site with bunded edges to direct water flow into decanting earth bund prior to discharge. Slash & offcuts used as stabilisation of embankments. Decanting earth bund located at upper point of landing. Landing area less than 3,000m².

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in the Auckland region

RY ACTIVITIES – EROSION & SEDIMENT CONTROL

mmonly undertaken forestry activities, how they might be undertaken diment control perspective and the types of control measures that can potential effects on the receiving environment. Each activity is nsiderations discussed, and an erosion and sediment control toolbox

d in this section include:

d Firebreaks
on

g Management

ads, landings and haul tracks are essentially earthwork activities and outlined a number of commonly implemented erosion and sediment for these activities.

ure 9.4 provides a summary of the operating thresholds based on a the erosion and sediment controls mentioned in the previous section.

BEST PRACTICE PLANNING ELEMENTS

Regional and district plans can include the following in order to address sedimentation and pollution:

UNDERTAKE A WIDER ASSESSMENT OF SEDIMENTATION ISSUE

The management of sedimentation cannot be left to individual resource consents as it is difficult, if not impossible, to deal with cumulative effects on a case-by-case basis.

Key points to consider:

- Review sedimentation issues from "top-of-catchment to harbour" analysing sediment yield from all sources including stream banks, coastal erosion, stormwater discharges and individual earthwork sites
- Project likely sediment yields based on future urban development
- Assess likely effects of current and projected future sediment levels on coastal ecosystems

Example Mahurangi Action Plan, Auckland

Sediment is the priority issue in the Mahurangi catchment. Rates of sediment entering the Mahurangi harbour have significantly increased as a result of human activities, including deforestation, development and intensive land use.[10] Actions identified to reduce sediment generation include:

- Developing a riparian management programme which includes retiring land, fencing and replanting of riparian and foreshore corridors, prioritising areas for action and providing funding
- Planting shoreline and stream margins and fencing where adjoining land will be grazed
- Educating landowners on best practice methods of development and land use (such as for roading, farming and forestry) and simple stormwater solutions such as adopting green engineering and low impact design to reduce the impact of stormwater from heavy rainfall and storm events
- Balancing economic return and environmental effects of land use
- Promoting engagement with land user groups to promote less sediment generating forms of land use

Mahurangi Harbour, Auckland

BEST PRACTICE PLANNING ELEMENTS (continued)

CONTROL LAND-BASED ACTIVITIES THAT CAN GENERATE INCREASED LEVELS OF SEDIMENT AND POLLUTION

Set objectives, policies and rules in regional policy statements, regional plans and district plans, and through conditions attached to resource consents, that control a range of activities such as earthworks, vegetation clearance, forestry, agriculture and stock grazing in the coastal environment to minimise levels of sedimentation and pollution.

Key points to consider:

- Consider whether current planning controls for earthworks and other sediment-generating activities such as forestry harvesting and track construction are adequate
- Consider whether there are particular erosion-sensitive sites in a catchment which need more careful management and rigorous controls
- Provide for generous setbacks from coastal margins for coastal development, including riparian margins
- Require the retention of riparian buffer zones along waterways and the coastal edge for farming and forestry activities to prevent large amounts of sediment from entering the coastal marine area
- Develop and implement controls to minimise the discharge of nutrients from rural land uses

Example Christchurch City Plan Chapter 10 Water Resources

Objective 1

To assist in the protection of the availability of water and in the preservation and enhancement of water quality of surrounding coastal waters and the underground and surface fresh water of the District.

Policies

1A To ensure that activities do not adversely affect the quality of surface, ground and coastal waters and their associated aquatic habitats.

1C To promote measures that minimise non-point source discharges of contaminants into water bodies and the coastal area.

1D To promote the use of land to maintain and where possible enhance water quality.

1E To retain, protect and promote the establishment of riparian vegetation.

Avon River, Christchurch

BEST PRACTICE PLANNING ELEMENTS (continued)

CONTROL GENERATION AND DISPOSAL OF STORMWATER AND SEWAGE

Set objectives, policies and rules that control on-site stormwater and sewerage generation and disposal. Further advice and guidance can be found in Auckland Council's Technical Publications (including TP10 – *Design guideline manual stormwater treatment devices*[11], TP58 third edition – *On-site wastewater systems*[12] and TP124 – *Low Impact Design Manual for the Auckland Region*[13]).

Key points to consider:

- Include site coverage limits
- Encourage use of porous surfaces in developments
- Encourage use of green infrastructure including constructed wetlands and swales to manage stormwater
- Include density limits
- Provide for generous setbacks from coastal margins for coastal development, including riparian margins
- Consider management options in extreme weather events, equipment failures and emergency events

Example Horizons Regional Council Manual for On-site Wastewater Systems Design and Management

Permitted Activity Rules 1.3.3 New and upgraded discharges of domestic wastewater.

The discharge of domestic wastewater into or onto land from an on-site wastewater treatment and disposal system which either—

- Is newly established after this rule becomes operative; or
- Involves the upgrade of a system that existed prior to this rule coming into effect; is permitted provided: …

  (c) Where the property within which the discharge occurs is less than 10 ha

  (i) The property shall cover an area of at least either 5000m^2 for properties created by subdivision after this rule comes into effect, or 2500 m^2 for properties that existed prior to this rule coming into effect.

Central Plateau, North Island

BEST PRACTICE PLANNING ELEMENTS (continued)

CONTROL GENERATION OF SEDIMENT AND POLLUTION FROM MARINE-BASED ACTIVITIES

Set objectives, policies and rules that control the location of marine-based activities that have the potential to increase sedimentation and pollution of the coastal environment.

Key points to consider:

- Ensure contaminated discharges from marinas and boat haul out yards are captured and prevented from entering the wider marine area
- Encourage the location and design of marine facilities to reduce the need for dredging
- Identify the most appropriate disposal location for dredged material from an environmental, social, cultural and economic perspective. This will depend on the circumstances, particularly the quantity and quality of the sediment to be disposed of and the availability of suitable land-based disposal sites
- Control stocking rate and feed levels associated with fed aquaculture

Example Regional Coastal Plan for Northland – Chapter 22 Dredging and Dredging Spoil Disposal

22.3 Objective.
Provision for capital and maintenance dredging that is needed for the establishment and operation of appropriate facilities in the coastal marine area (such as Marinas and Ports), while avoiding, remedying, or mitigating the adverse effects of such dredging and any associated spoil disposal in the coastal marine area.

22.4 Policies
7. To promote land-based disposal of dredging spoil from both capital and maintenance dredging of the coastal marine area, where this better meets the purpose of the Act.

Explanation.
Disposal of dredging spoil to sea or into intertidal areas can create significant adverse effects. In most situations, spoil disposal to land avoids these effects and therefore should be used where practicable.

22.5 Methods of Implementation
9. In processing applications for resource consents for dredging spoil disposal, require evaluation of the costs and benefits of land-based disposal options.

Marsden Point, Whangarei Harbour

BEST PRACTICE PLANNING ELEMENTS (continued)

SUPPORT THE USE OF OTHER METHODS AND TOOLS

Incorporate a range of other tools and methods to address sedimentation and pollution.

Key points to consider:

- Provide incentives for the revegetation of land and other remedial measures
- Establish high standards for the provision of sewerage and stormwater infrastructure which is constructed by the developer and transferred to the council on completion through Long Term Plans and Annual Plans (prepared under the Local Government Act 2002)
- Prevent the expansion of water reticulation into areas where there are existing septic tank soakage problems. The availability of reticulated water increases water use and exacerbates the soakage problem
- Retrofit, renew and replace stormwater and sewerage infrastructure which is contributing to water pollution. New development can add to an existing sewer overflow problem and can be the trigger for the provision of community sewerage systems, particularly in areas where septic tanks have proven inadequate
- Provide alternative hazardous wastes disposal options for residents and industry

Example Bay of Plenty Regional Land and Water Plan (2008)

4. Discharges to water and land

4.2 Discharge of stormwater

Method 120
Encourage measures to reduce the volume of stormwater discharged to the environment from urban areas, including:

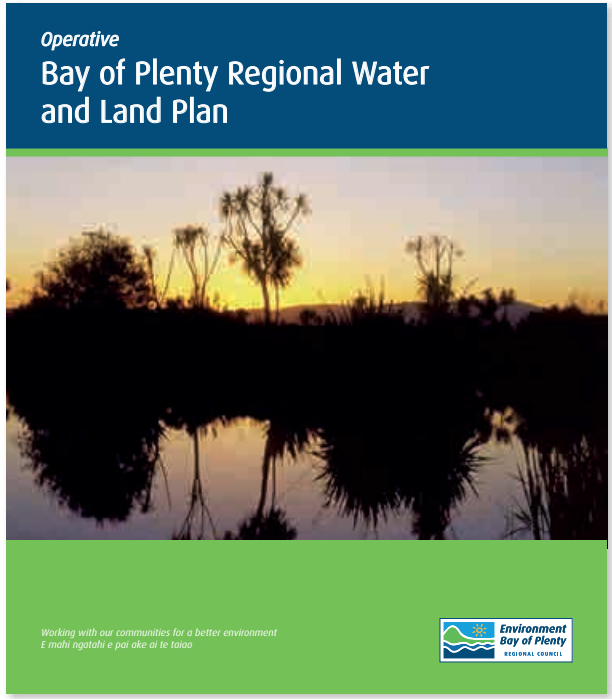
(a) The appropriate design of subdivisions and other land use developments to minimise stormwater runoff, such as minimising the increase in the area of impermeable surfaces and retaining natural flood retention areas.

(b) On-site management and disposal of stormwater to soakage, where practicable and appropriate.

(c) Storage and reuse of stormwater, including for irrigation or creation of aquatic habitats, where practicable and appropriate.

(d) Retention or creation of non-structural stormwater controls, where appropriate…

…Method 123
Encourage district and city councils to investigate measures to return piped streams in urban areas to their natural state, where practicable and achievable within existing urban areas.



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FOOTNOTES

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2 section 15
3 http://www.mfe.govt.nz/publications/water/anzecc-water-quality-guide-02/index.html
4 Ministry for the Environment, 1997
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08 PROTECTING COASTAL BIODIVERSITY

Kawaw Island, Haurak Gulf

IN THIS SECTION...

INTRODUCTION

New Zealand's coast is home to a diverse range of flora and fauna, including many species that are found nowhere else on Earth. The country's mild climate resulting from the oceanic context of its islands, and extensive land-sea interface, supports a specialised suite of plant species that do not grow further inland. Although heavily reduced from their pre-human natural state, coastal ecosystems also support an unusually wide range of birdlife and several marine mammal species.

Because indigenous habitats on the coast are some of the most modified in the country, it is important that remaining high quality areas are protected and that degraded areas are restored where possible.

More information about coastal biodiversity and its importance can be found in the EDS Guide *Treasuring our biodiversity* available at www.eds.org.nz.

Estuarine environment, Far North District

VISION

Section 6 of the RMA provides that "the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna" is a matter of national importance. The NZCPS 2010 contains new provisions requiring the protection and management of biodiversity within the coastal environment. Objective 1 seeks to protect representative or significant natural ecosystems and sites of biological diversity in the coastal environment. It also seeks to maintain the diversity of indigenous coastal flora and fauna.

Other elements of Objective 1 are important for coastal biodiversity including "maintaining or enhancing natural biological and physical processes", sustaining ecosystems and maintaining coastal water quality.

Objective 1

To safeguard the integrity, form, functioning and resilience of the coastal environment and sustain its ecosystems, including marine and intertidal areas, estuaries, dunes and land, by:

- maintaining or enhancing natural biological and physical processes in the coastal environment and recognising their dynamic, complex and interdependent nature;
- protecting representative or significant natural ecosystems and sites of biological importance and maintaining the diversity of New Zealand's indigenous coastal flora and fauna; and
- maintaining coastal water quality, and enhancing it where it has deteriorated from what would otherwise be its natural condition, with significant adverse effects on ecology and habitat, because of discharges associated with human activity.

In order to appreciate the full scope of Objective 1, it is important to understand the key biological concepts and terms used.

- Safeguard - The objective is to safeguard the integrity, form, functioning and resilience of the coastal environment. Human activities that adversely affect these elements need to be avoided or managed through planning frameworks. Efforts to reduce the risk of undesired shifts between ecosystem states should address land use, nutrient stocks, soil properties, freshwater dynamics and the biomass of long-lived organisms[1]
- Integrity – This term is associated with how "intact" an environment is and its functioning relative to the potential or original state of the ecosystem before human alterations were imposed. It includes the non-living chemical and physical factors and the interplay between parts of the system. One definition of integrity is "the capability of supporting and maintaining a balanced, integrated, adaptive community of organisms having a species composition, diversity and functional organisation comparable to that of the natural habitat of the region"[2]
- Resilience – Resilience has been defined as the capacity of a system to absorb disturbance and reorganise while undergoing change so as to retain essentially the same function, structure, identity and feedbacks.[3] A resilient ecosystem resists damage and recovers quickly from seemingly random disturbances (such as fires, flooding, windstorms and insect population explosions) and human activities (such as deforestation and the introduction of exotic plant or animal species)
- Sustain – This is a key element of Objective 1. The Planning Tribunal (which has been subsequently replaced by the Environment Court) has stated that sustainable management "places" the emphasis on ensuring that resources are not used up at a rate greater than their recuperative properties allow. The overriding intention of the legislation is to ensure that successive generations "husband the available resources and pass them onto the next in no lesser state than was available to the donor generation".[4] This means that the ecosystems of the coastal environment should endure for future generations in the same or better state as they were previously

New Zealand sea lion mother and pup, Otago Peninsula

ISSUES

The coasts of New Zealand were once covered in native vegetation, formed dunes, wetlands, beaches and rocky cliffs, and in some places had coastal forest to the water's edge. The plant communities would have graded from those inhabiting estuaries and lagoons, to dunes and rocky cliffs, and finally those forming diverse coastal forests. Many coastal habitats have been destroyed or significantly modified since human settlement. Only small areas of remnant coastal vegetation and other habitats have survived. Due to the extent of loss, many of the remaining ecosystems and habitats are highly significant. The biodiversity in these ecosystems is among the most threatened in New Zealand.

In addition, there have been significant impacts within the marine environment including from fishing, aquaculture and degradation of coastal water quality. These issues are discussed further in the EDS Guide *Managing the marine environment*.

Development along the coastal margin, in surrounding catchments and in coastal waters, has significant implications for coastal biodiversity. Some of these include:

- Habitat loss, and associated fragmentation of natural areas, which increases their susceptibility to infestation by pests and weeds
- Reduction in the population size of indigenous fauna, which can be supported by natural areas, increasing the risk of local and regional extinctions
- Loss of estuaries and coastal wetlands through reclamation, resulting in the loss of these habitats for indigenous species and loss of buffering and filtering functions
- Excessive rates of sedimentation in some estuaries and harbours resulting from the removal of indigenous forest and the effects of other land uses, which smothers bottom-living marine organisms, limits fish spawning and in northern areas contributes to the increased spread of mangroves
- Numerous invasions of weeds and pests close to coastal urban settlements, including domestic cats and dogs, leading to the loss of native bird and invertebrate species and the disruption of forest regeneration processes
- Exacerbated coastal erosion resulting from activities such as damming of rivers and the removal or de-stabilisation of coastal foredunes
- Habitats of threatened birds, shellfish and sand dune vegetation and fauna being destroyed by vehicles driving on the beach and in unpaved coastal areas

Coastal development, Whangarei

POLICY

Protection of biodiversity

Policy 11 requires district and regional plans to protect indigenous biological diversity in the coastal environment. There is an internal hierarchy built into Policy 11 that is similar to the policies related to natural character and landscape. It requires the avoidance of all adverse effects of activities on the matters referred to in part (a) which includes species that are listed in New Zealand and internationally as threatened or at risk. Significant adverse effects are to be avoided and other adverse effects are to be avoided, remedied or mitigated on the matters listed in part (b). The focus of these matters is on the protection of important habitats.

Dotterel, Opoutere, Thames-Coromandel District

Policy 11: Indigenous biological diversity (biodiversity)

To protect indigenous biological diversity in the coastal environment:

a. avoid adverse effects of activities on:
   i. indigenous taxa that are listed as threatened or at risk in the New Zealand Threat Classification System lists;
   ii. taxa that are listed by the International Union for Conservation of Nature and Natural Resources as threatened;
   iii. indigenous ecosystems and vegetation types that are threatened in the coastal environment, or are naturally rare;
   iv. habitats of indigenous species where the species are at the limit of their natural range, or are naturally rare;
   v. areas containing nationally significant examples of indigenous community types; and
   vi. areas set aside for full or partial protection of indigenous biological diversity under other legislation; and

b. avoid significant adverse effects and avoid, remedy or mitigate other adverse effects of activities on:
   i. areas of predominantly indigenous vegetation in the coastal environment;
   ii. habitats in the coastal environment that are important during the vulnerable life stages of indigenous species;
   iii. indigenous ecosystems and habitats that are only found in the coastal environment and are particularly vulnerable to modification, including estuaries, lagoons, coastal wetlands, dunelands, intertidal zones, rocky reef systems, eelgrass and saltmarsh;
   iv. habitats of indigenous species in the coastal environment that are important for recreational, commercial, traditional or cultural purposes;
   v. habitats, including areas and routes, important to migratory species; and
   vi. ecological corridors, and areas important for linking or maintaining biological values identified under this policy.

Policy 11 protects threatened species as well as ecosystems. Coastal managers now need to familiarise themselves with the New Zealand Threat Classification System lists and the International Union for Conservation of Nature and Natural Resources lists which can be found at http://www.iucnredlist.org/.

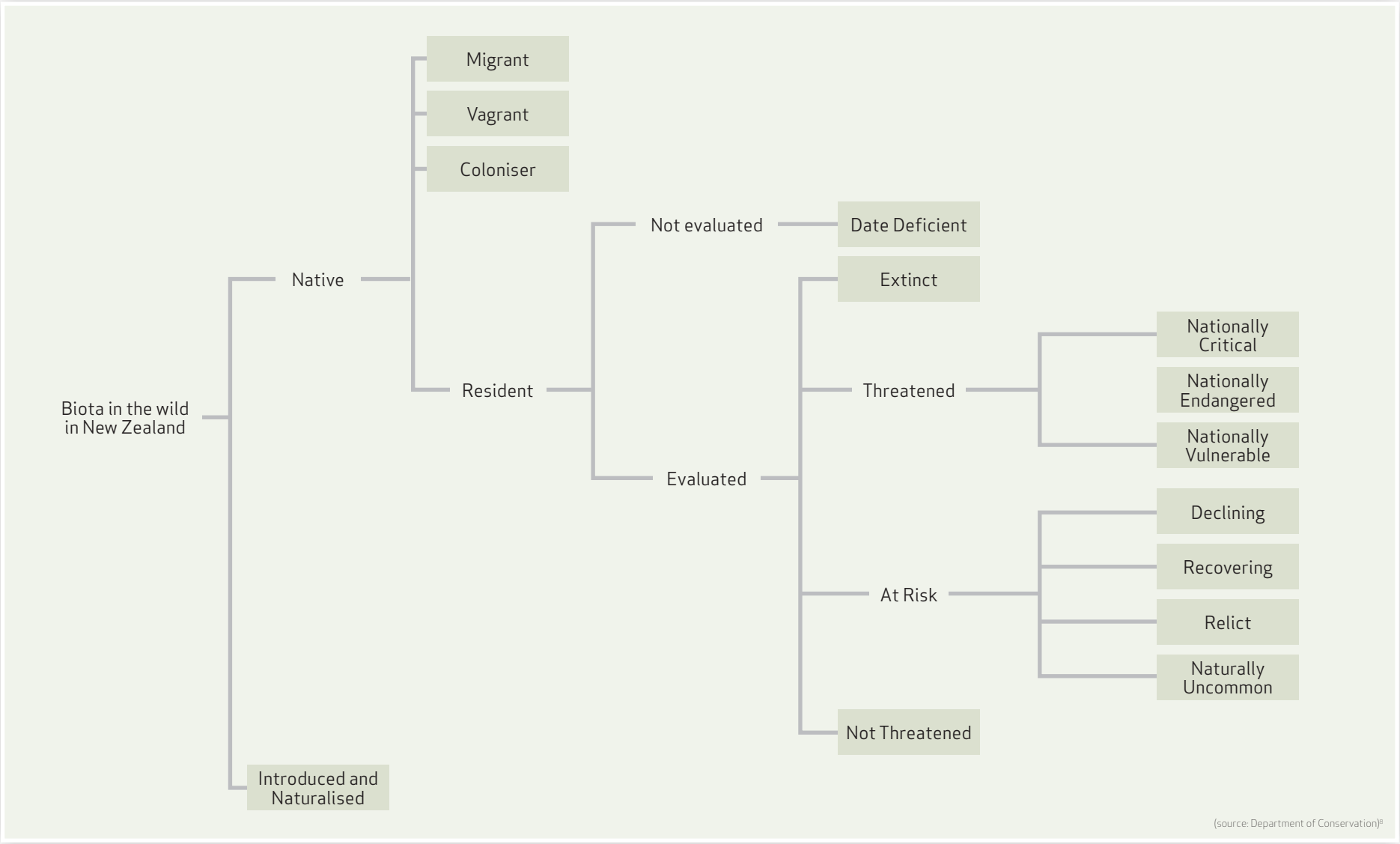
The New Zealand Threat Classification System is a national system led by the Department of Conservation. It uses objective criteria and information drawn from a wide range of experts to rigorously assess the risk of extinction faced by New Zealand plants, animals and fungi.[5] Each taxon is placed in a category that reflects the level of risk it faces, as shown in Figure 8.1. Regional and district councils are now required to identify the threatened and at risk species within their jurisdiction which need to be protected from adverse effects. Examples of such protected species provided in the NZCPS 2010 are Maui's dolphin, Hector's dolphin, New Zealand fairy tern and Southern New Zealand dotterel.[6]

Policy 11(a)(iv) requires adverse effects of activities to be avoided on habitats of indigenous species which are naturally rare. Landcare Research has compiled a list of 72 types of historically rare ecosystems identified as occurring in New Zealand, many of which are coastal.[7] This recent scientific work, which is based on a robust assessment framework, provides council staff with far more clarity around the status of threatened ecosystems.

Hector's Dolphins, Akaroa Harbour, Banks Peninsula

POLICY (continued)

Figure 8.1 The Threat Classification System taxa classification process



(source: Department of Conservation)[8]

Policy 11 lists the kinds of habitats it is endeavoring to protect from significant adverse effects. These include estuaries, lagoons, coastal wetlands, dunelands, intertidal zones, rocky reef systems, eelgrass and saltmarsh. The policy also highlights the importance of ecological corridors and places important for migratory species and for the vulnerable life stages of indigenous species. In addition, areas of predominantly indigenous vegetation are to be protected, which would include mangroves.

There are situations where the provision of public access to the coast can conflict with protection of biodiversity. The NZCPS 2010 recognises the public expectation of, and need for, walking access to and along the coast and directs decision-makers, through Policy 19(3)(a), to only impose a restriction on these where it is necessary to protect threatened indigenous species. This is discussed further in Chapter 10.

In terms of protecting marine biodiversity, Policy 12 recognises the importance of marine biosecurity. It requires regional councils to control, as far as practicable, activities which could cause harmful aquatic organisms to be released or spread. It identifies a number of activities which might cause this including the introduction of marine structures, operation of vessels, dredging and aquaculture.

Regional councils face a major challenge in addressing marine biosecurity issues. This is due, in part, to the weak linkages between the RMA and the Biosecurity Act 1993 where much of the actual implementation of biosecurity management occurs. To undertake marine biosecurity effectively, councils need to integrate the provisions of their regional pest management strategies prepared under the Biosecurity Act with those in RMA plans. Although it is important to control activities which create marine biosecurity risks in regional coastal plans as required in Policy 12, this in itself is unlikely to achieve effective control or containment of marine biosecurity threats or incursions, many which are the result of overseas vessels entering the country.

Policy 12: Harmful aquatic organisms

1. Provide in regional policy statements and in plans, as far as practicable, for the control of activities in or near the coastal marine area that could have adverse effects on the coastal environment by causing harmful aquatic organisms to be released or otherwise spread, and include conditions in resource consents, where relevant, to assist with managing the risk of such effects occurring.
2. Recognise that activities relevant to (1) include:
    a. the introduction of structures likely to be contaminated with harmful aquatic organisms;
    b. the discharge or disposal of organic material from dredging, or from vessels and structures, whether during maintenance, cleaning or otherwise; and whether in the coastal marine area or on land;
    c. the provision and ongoing maintenance of moorings, marina berths, jetties and wharves; and
    d. the establishment and relocation of equipment and stock required for or associated with aquaculture.

Restoration of biodiversity

Ways to achieve restoration of coastal biodiversity are recommended by Policy 14 and discussed in more detail in Chapter 5. They aim to promote restoration or rehabilitation of indigenous habitats in the coastal environment. Methods include identifying areas and opportunities for restoration, using statutory tools (such as regional and district RMA documents) to encourage restoration to be undertaken, and imposing resource consent conditions, particularly for degraded areas.

In addition, non-regulatory methods are essential to support the restoration of biodiversity and are a key way to achieve the vision sought by the NZCPS 2010. Approaches such as providing education, technical support and financial incentives to coast care groups and private landowners are one of the main ways positive change can be achieved on the ground. In addition, the promotion and facilitation of permanent legal protection is a crucial tool to protect and restore biodiversity. Many of these methods can be provided for, and be supported through, regulatory plans as well as other statutory documents. For additional information on these methods see the EDS Guide *Treasuring our biodiversity* available at www.eds.org.nz.

Mountain Landing, Bay of Islands

BEST PRACTICE DESIGN ELEMENTS

Coastal land development designed to avoid adverse impacts on coastal biodiversity should include the following elements where they are relevant:

CREATE AND RESTORE VEGETATED BUFFER AREAS

The inclusion of buffer areas between important coastal habitats and development will help to protect coastal biodiversity.

Key points to consider:

- Identify key natural habitats and features which require buffers
- Include appropriate sized buffer areas along riparian and coastal margins
- Fence off these areas to protect the plants and animals from stock, vehicles and foot traffic
- Revegetate and maintain buffers between coastal bird populations and urban development
- Use locally-sourced indigenous plants, that are appropriate to the site
- Include important linkage areas
- Implement regular weed and pest control
- Integrate with management of existing protected areas

Undesirable example Ngunguru Bay, Whangarei District

The location of the houses close to the beachfront, and lack of any significant vegetative buffer, provides little habit for local flora and fauna

Desirable example Proctors Beach, Northland

Weed control using on-site mobile compost bins containing hand pulled ice plant weeds helps to protect local native plants

BEST PRACTICE DESIGN ELEMENTS (continued)

PROHIBIT DOMESTIC PETS IN SUBDIVISIONS NEAR SENSITIVE COASTAL AREAS

The prohibition of domestic pets in some coastal subdivisions is important to help protect sensitive coastal bird habitats.

Key points to consider:

- Covenant land titles to exclude the keeping of domestic pets
- Develop body corporate rules to prohibit keeping of cats where appropriate
- Support self-policing measures in the area

Undesirable example **Domestic cat, Auckland**

Domestic cats can kill native birds and other small animals, thereby negatively impacting on the biodiversity of local coastal environments

Desirable example **Bream Tail, Kaipara District**

To protect native wildlife on the property, cats and mustelids are prohibited and property owners may keep no more than two dogs

BEST PRACTICE DESIGN ELEMENTS (continued)

PROVIDE FOR RESTORATION OF COASTAL FOREST

In particular, provide for restoring the natural succession between the coastal edge, dunes, woody areas and coastal forest. The Dunes Restoration Trust of New Zealand has some valuable resources for restoring coastal forest areas, which can be found at www.dunestrust.org.nz

Key points to consider:

- Identify key natural habitats and features which require restoration
- Fence off these areas to protect the plants and animals from stock, vehicles and unmanaged foot traffic
- Replant retired areas with indigenous coastal forest species
- Where possible, use locally-sourced indigenous vegetation for replanting
- Implement regular weed and pest control

Undesirable example **Stock in a coastal wetland**

Stock allowed into coastal wetlands can impact on biodiversity values through damaging indigenous vegetation and soils

Desirable example **Te Henga (Bethells Beach), Auckland**

Low lying dune hollows have been successfully restored to allow native species to regenerate naturally

BEST PRACTICE DESIGN ELEMENTS (continued)

PERMANENTLY PROTECT IMPORTANT BIODIVERSE AREAS

Provide tools for the permanent protection of areas of indigenous vegetation and habitat from future development.

Key points to consider:

- Design development to avoid important natural habitats and features
- Require Reserves Act, Queen Elizabeth II Trust or Nga Whenua Rahui covenants to be registered on the land title to protect significant areas in perpetuity
- Protect existing and replanted native bush areas by stock-proof fencing and regular weed and pest control
- Ensure management decisions consider effects on protected areas

Undesirable example Tutukākā Peninsula, Whangarei District

The encroachment of development into areas of coastal forest increases risks to indigenous species

Desirable example Ocean Beach, Hastings District

Predator-proof fencing allows native vegetation and birdlife to regenerate

BEST PRACTICE PLANNING ELEMENTS

Regional and district plans can include the following in order to achieve preservation of coastal biodiversity:

IDENTIFY SIGNIFICANT NATURAL ECOSYSTEMS AND SITES OF BIOLOGICAL IMPORTANCE

Local and regional authorities should identify significant natural ecosystems and sites of biological importance within their jurisdiction, including those in the coastal marine area, and identify them on maps and/or in a Significant Natural Area schedule attached to their regulatory plan. An alternative approach is to define significant ecosystem types.

Key points to consider:

- Include sites within near-shore and intertidal areas, estuaries, dunes and coastal land as well as marine areas
- Spatially identify the location of significant areas and habitats within district and regional plans, using a schedule or maps
- Where it is not practicable to identify significant vegetation and significant habitats in advance, include robust and ecologically valid criteria in the plan[9] so that the actual spatial areas can be identified during the resource consenting process. Rules may then be included to place restrictions on certain activities within areas that meet the criteria
- Adopt a hybrid approach where specific identified areas are incorporated into plans using a schedule or map and criteria or ecosystem types are specified for the identification of additional areas
- Sites of biological importance in the coastal environment may include those that provide habitat for significant life functions such as juvenile nursery habitats, feeding grounds, spawning habitats and areas that provide for the transition from larval to benthic phases during the lifecycle of marine organisms
- Include the entire habitats of threatened species on coastal land, in coastal freshwater bodies and in the marine areas including migratory routes

Example Inventory of coastal areas of local or regional significance in the Taranaki Region

The purpose of the Inventory is to provide information on coastal areas of local or regional significance in the Taranaki region, and to provide information on public access to the coastal marine area. Further, the Inventory identifies where subdivisions have occurred in the coastal area since 1999. The Inventory is intended to facilitate statutory bodies in their decision-making on the management of public access and development in the coastal area. Ecological or scientific sites of value include areas or features that contain rare and endangered indigenous flora or fauna; are of scientific interest; are important or unique coastal environment ecosystems; or contain spawning, nursery or feeding areas for marine animals.[10]

Tongaporutu, Taranaki

BEST PRACTICE PLANNING ELEMENTS (continued)

IDENTIFY LOCATIONS WHERE CERTAIN ACTIVITIES ARE INAPPROPRIATE

Regional policy statements and plans should identify areas of the coastal environment where particular activities are inappropriate due to their proximity to taxa, ecosystems, habitats and areas identified in accordance with Policy 11.

Key points to consider:

- Develop objectives, policies and rules which restrict development in areas of high ecological sensitivity and in areas with high natural values
- Control development and activities within the broader catchment where they may result in discharges into areas of the coastal environment which have biodiversity importance
- Spatially identify sensitive areas on a map in the relevant planning instrument
- Implement buffer areas around the relevant taxa, ecosystems, habitats and areas identifying where specified activities should not take place

Example Whakatāne District Bylaws

These bylaws prohibit the use of vehicles on any beach within Whakatāne District. This is to protect indigenous sand-binding plants and the nests of the New Zealand dotterel. An exception is made for vehicles launching boats and those used by officials and rescue services.

Ohope Beach, Whakatāne District

BEST PRACTICE PLANNING ELEMENTS (continued)

DEVELOP APPROPRIATE OBJECTIVES, POLICIES AND METHODS (BOTH STATUTORY AND NON-STATUTORY) TO PROTECT COASTAL BIODIVERSITY

Protecting coastal fauna, flora and habitats from inappropriate activities is important to retain coastal biodiversity values.

Key points to consider:

- Support the development of linkages between terrestrial forest, dune systems, estuaries and the marine environment
- Protect native coastal vegetation to support natural succession
- Promote vegetation and habitat corridors and 'stepping stones' for wildlife
- Support the protection and re-establishment of riparian areas and coastal margins
- Protect different habitat types which act as a buffer between the land and the sea
- Protect important marine habitats
- Retain estuaries and wetlands as buffers or filters for contaminants and sediments
- Provide for financial and other incentives for landowners to covenant land for coastal biodiversity protection purposes
- Support the establishment of beach care and coast care restoration groups, and restoration and protection in surrounding catchments
- Provide for the maintenance and enhancement of coastal reserve land to ensure it is kept in a weed and pest free state

Example Waikato Regional Policy Statement

Chapter 3 Significant Resource Management Issues, Objectives, Policies and Methods

3.11 Plants and Animals (Biodiversity)

3.11.4 Maintenance of Biodiversity Policy Two: Regionally Consistent Criteria For Use When Identifying Significant Areas. Use a consistent approach throughout the Waikato Region when identifying areas of significant indigenous vegetation and significant habitats of indigenous fauna.

Implementation Methods

1. When preparing or implementing regional and district plans, assessing resource consent applications and in the consideration of areas to be protected by non-regulatory mechanisms; an area of indigenous vegetation or habitat for indigenous fauna is significant if the relevant decision-makers are satisfied, on the basis of all evidence presented, that the area currently meets one or more of the criteria in Appendix 3.
2. Through liaison with other organisations that are undertaking protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna advocate the use of the criteria in Appendix 3.

See Appendix 3 of the Waikato Regional Policy Statement on next page

Waikawau Bay, Thames - Coromandel District

BEST PRACTICE PLANNING ELEMENTS (continued)

Appendix 3 Waikato Regional Policy Statement:
Criteria for Determining Significant Indigenous Vegetation and Significant Habitats of Indigenous Fauna

Updated November 2002
The following criteria are to be used to identify areas of significant indigenous vegetation and significant habitats of indigenous fauna as they exist at the time the criteria are being applied.

Previously Assessed Site

1. It is indigenous vegetation or habitat for indigenous fauna that has been specially set aside by statute or covenant for protection and preservation unless the site can be shown to meet none of Criteria 3-11.
2. It is indigenous vegetation or habitat recommended for protection by the Nature Heritage Fund, or Nga Whenua Rahui committees, or the Queen Elizabeth the Second National Trust Board of Directors, unless the site can be shown to meet none of Criteria 3-11.

Ecological Values

3. It is vegetation or habitat that is currently habitat for indigenous species or associations of indigenous species that are:
   - threatened with extinction; or
   - endemic to the Waikato Region.[1]
4. It is indigenous vegetation or habitat type that is under-represented (10% or less of its known or likely original extent remaining) in an Ecological District, or Ecological Region, or nationally.
5. It is indigenous vegetation or habitat that is, and prior to human settlement was, nationally uncommon such as geothermal, Chenier plain, or kaarst ecosystems.
6. It is wetland habitat for indigenous plant communities and/or indigenous fauna communities[2] that has not been created and subsequently maintained for or in connection with:
   - waste treatment; or
   - wastewater renovation; or
   - hydro electric power lakes[3]; or
   - water storage for irrigation; or
   - water supply storage;

   unless in those instances they meet the criteria in Whaley *et al*. (1995).
7. It is an area of indigenous vegetation or naturally occurring habitat that is large relative to other examples in the Waikato Region of similar habitat types, and which contains all or almost all indigenous species typical of that habitat type[4]
8. It is aquatic habitat[5] that is a portion of a stream, river, lake, wetland, intertidal mudflat or estuary, and their margins, that is critical[6] to the self sustainability of an indigenous species within a catchment of the Waikato Region and which contains healthy, representative populations of that species.
9. It is an area of indigenous vegetation or habitat that is a healthy and representative example of its type because:
   - its structure, composition, and ecological processes are largely intact; and
   - if protected from the adverse effects of plant and animal pests and of adjacent landuse (e.g. stock, discharges, erosion), can maintain its ecological sustainability[7] over time.
10. It is an area of indigenous vegetation or habitat that forms part of an ecological sequence[8], that is either not common in the Waikato Region or an ecological district, or is an exceptional, representative example of its type.

Role in Protecting Ecologically Significant Area

11. It is an area of indigenous vegetation or habitat for indigenous species (which habitat is either naturally occurring or has been established as a mitigation measure) that forms, either on its own or in combination with other similar areas, an ecological buffer, linkage or corridor and which is necessary to protect any site identified as significant under Criteria 1-10 from external adverse effects.

FOOTNOTES TO APPENDIX 3 OF THE WAIKATO REGIONAL POLICY STATEMENT

1 See Glossary for definition of endemic to the Waikato Region.
2 Does not include exotic rush / pasture communities.
3 Does not include Lake Taupo.
4 This criterion is not intended to select the largest example only in the Waikato Region of any habitat type.
5 Excluding artificial water bodies, except those created for the maintenance and enhancement of biodiversity or as mitigation for a consented activity.
6 Critical means essential for a specific component of the life cycle and includes breeding and spawning grounds, juvenile nursery areas, important feeding areas and migratory pathways.
7 See Glossary for definition of ecological sustainability.
8 See Glossary for definition of ecological sequence.

BEST PRACTICE PLANNING ELEMENTS (continued)

SET ACCOMPANYING RULES AND CONSENT CONDITIONS TO CONTROL COASTAL SUBDIVISION

Provide appropriate rules and conditions of consent to control the impact of coastal subdivision and development on biodiversity.

Key points to consider:

- Require adequate setbacks for coastal development and subdivision from the coast
- Require buffer zones to maintain some distance between the important sites and the works being undertaken
- Relocate existing structures (such as roads and infrastructure) away from sensitive habitats including those on the coastal edge
- Schedule works to avoid ecologically important periods
- Control extent of earthworks
- Control extent and type of vegetation clearance
- Exclude domestic pets where required
- Impose covenants to protect existing important habitat and require the provision of esplanade reserves, strips or reserve contributions as these can provide refuges or habitats for wildlife and offer important stepping stones for birds and animals
- Impose a requirement to rehabilitate a site through planting after completion of the works
- Require fencing of estuaries or riparian margins to exclude stock

Example Kapiti Coast District Council Best Practice Subdivision and Development Guide

This guide includes a section dedicated to responding to the coastal landform which provides guidance on appropriate design for coastal subdivisions and developments. One of the benefits of this approach is the preservation of the ecology of the coast. The Council will consider the investment in ecological retention as a significant positive effect (compared to the 'conventional' alternatives) when considering consent applications.[11] This Guide is discussed further as a case study in Part Three.

Kapiti Coast, Wellington

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FOOTNOTES

1 Brake L and R Peart, 2012, 65
2 Brake L and R Peart, 2012, 64
3 Brake L and R Peart, 2012, 65
4 Brake L and R Peart, 2012, 65
5 http://www.doc.govt.nz/publications/conservation/nz-threat-classification-system/
6 NZCPS 2010, 16
7 Williams P et al, 2007
8 http://www.doc.govt.nz/documents/science-and-technical/bbb8.pdf
9 Greater Wellington Regional Policy Statement, Policy 22
10 http://www.trc.govt.nz/assets/Publications/guidelines-procedures-and-publications/Coastal/coastalinventory.pdf
11 http://www.kapiticoast.govt.nz/Documents/Downloads/Best-Practice-Subdivision-and-Development-Guide.pdf

Te Kouma Harbour, Thames-Coromandel District

Oystercatchers, Opoutere, Thames-Coromandel District

09 MANAGING COASTAL HAZARDS

Oamaru, Waitaki District

IN THIS SECTION...

INTRODUCTION

Much of New Zealand's coastline is tectonically active, and exposed to tsunami, as well as being prone to erosion. In addition, the sea level around the country is rising at a steady rate (relative mean sea levels in New Zealand have risen by 0.16 metres over the last 100 years, on average[1]) and is predicted to accelerate with global warming.

It is only when people or property are threatened by natural events and processes that they are considered hazards. With over 75 per cent of New Zealanders residing within 10 kilometres of the shore,[2] our naturally high-energy and dynamic coastal environment becomes a potentially hazardous place if not well managed. Human-induced accelerated climate change will continue to exacerbate coastal erosion and other natural hazards, which in turn directly increase the risk of harm to infrastructure and private property. If the response to coastal hazards interferes with natural coastal processes and the migration of natural coastal features (for example, through the use of hard protection structures and river mouth cutting) then there will be adverse effects on natural habitats, ecosystems and public access.

Clarks Beach, Auckland

VISION

The vision for managing coastal hazards provided by the NZCPS 2010 reflects a strong movement away from the use of hard protection methods. Objective 5 places emphasis on locating new development away from hazard-prone areas, on considering managed retreat for existing development, and on protecting or restoring natural defences to coastal hazards.

Objective 5

To ensure that coastal hazard risks taking account of climate change, are managed by:

- locating new development away from areas prone to such risks;
- considering responses, including managed retreat, for existing development in this situation; and
- protecting or restoring natural defences to coastal hazards.

Palmers Beach, Great Barrier Island

ISSUES

Coastal development can increase the likelihood of natural hazards if it is poorly located or interferes with the natural coastal defences and movement of the coastal frontline. For example:

- The removal of dune vegetation or the dunes themselves, to improve views, can result in increased erosion and flooding when storm waves (or tsunami) erode or overtop the dunes
- The construction of dams or increased abstraction of freshwater, reducing sediment supply down rivers to the coast directly or indirectly via flow changes, can increase erosion in areas of the coast which normally receive that sediment
- The removal of sediments from the coastal environment, such as through sand mining, can initiate or exacerbate coastal erosion
- The construction of coastal structures such as causeways, groynes and jetties, which interfere with sediment movement along the coast, can increase coastal erosion in adjacent areas
- Deforestation and earthworks in coastal catchments can, at times of high rainfall, lead to excessive amounts of sediment being transported down river channels. This, in turn, may raise the beds of rivers causing flooding, particularly on coastal plains
- If development is located too close to the coast or sea level in areas affected by hazards, it will increase the demand for hard protection structures such as seawalls or groynes as the coastline erodes towards houses. If built, hard protection structures can, in turn, lead to greater erosion in adjacent areas of the coast

St Heliers Beach, Auckland

CURRENT LEGISLATIVE REGIME

Mechanism	Purpose	Direction
Resource Management Act 1991	Key legislation for managing the effects of natural hazards on the coast	Includes plan making and resource consents as methods to manage the effects of natural hazards and climate change
New Zealand Coastal Policy Statement 2010	States policies in order to achieve the purpose of the RMA and to guide regional and district planning	Powerful statutory guidance to help achieve the long term sustainable management of hazards within the coastal environment
Building Act 2004	Provides additional controls for local authorities to manage development within areas of identified natural hazards	Focussed on the adequacy of buildings rather than land use management and thus cannot be used as a substitute for RMA planning and management. Definition of a hazard is much more narrowly confined than the RMA definition and specific to identified hazards
Civil Defence Emergency Management Act 2002	Provides for the management of hazards and risks, emergency readiness, response, recovery and risk reduction	Sets out the duties, function and powers of central government, local government, emergency services, lifeline utilities and the general public
Local Government Act 2002	Provides the general framework, including obligations, restrictions and powers, under which local authorities operate	Requires councils to have particular regard to the contribution of core services to their communities, including the avoidance or mitigation of natural hazards
Reserves Act 1977	Empowers the Minister of Conservation to purchase, lease or accept land or acquire land under the Public Works Act 1981 for the purpose of a reserve	Allows a local authority to declare any land vested in it to be a reserve. The management of Crown reserves is often delegated to a local authority. Reserves can provide an important natural buffer to protect infrastructure and development from coastal hazards.
Environment Act 1986	Sets out the functions of the Ministry for the Environment	Provides advice to government on the identification and likelihood of natural hazards and the reduction of the effects of natural hazards
Local Government Official Information and Meetings Act 1987	Provides for the availability to the public of official information held by local authorities, including Land Information Memorandums	Includes any information held by councils identifying each (if any) special feature or characteristic of a specific property, including but not limited to potential erosion, avulsion, falling debris, subsidence, slippage, alluvion or inundation

Waihi Beach, Hauraki District

POLICY

The NZCPS 1994 contained six natural hazard related policies. The effectiveness of these was reviewed in 2004 and they were regarded as ranging from effective to ineffective.[3] The review identified a number of ways the policies could be strengthened. These recommendations, the increased awareness of coastal hazards and climate change that have resulted from research and hazard events since 2004, and the many submissions heard by the Board of Inquiry, have contributed to the new coastal hazard policies in the NZCPS 2010. These now provide clearer direction on how coastal hazards are to be managed in New Zealand.

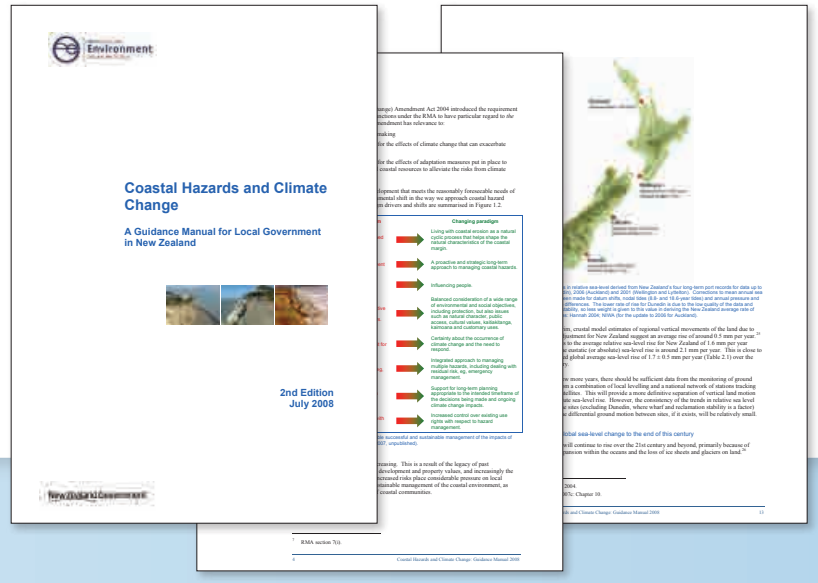
The NZPCS 2010 has a much stronger focus on mapping coastal hazards and adopts a risk-based management approach. In terms of response to coastal hazards, the NZCPS 2010 differentiates between "general" subdivision, use, and development (Policy 25) and "significant existing" development (Policy 27).

The coastal hazard objectives and policies of the NZCPS 2010 sit within the wider context of the climate change scenarios provided by the Fourth Assessment Report of the United Nations Intergovernmental Panel on Climate Change (IPCC).
The current IPCC estimate for mean global sea level is that it will rise by at least 18 to 59 cm between 1990 (1980-1999 average) and the 2090s (2090-2099 average), taking the full range of scenarios into account.[4]
These estimates are currently being revised as part of the fifth IPCC report which is due to be released in 2013-2014. To identify likely future climate changes across New Zealand, NIWA has projected changes from global climate models which have been statistically downscaled. They have predicted a magnitude of change of at least 18-59 cm rise (New Zealand average) between 1990 and 2100.[5] The sea level rise scenario is just one set of numbers that are needed to plan for sea-level rise locally. In addition, land levels, sediment budgets and subsidence risks need to be considered.

Identification of coastal hazards

Policy 24 provides guidance on the identification of coastal hazards. It requires that hazard risks over at least 100 years be assessed. The assessment is to have regard to a number of factors including sea-level rise, natural fluctuations of erosion and accretion, potential for inundation, human influences and the effects of climate change.

Councils are directed to take into account any national guidance and the best available information on the likely effects of climate change on the region and district. National guidance has been provided in the form of the Ministry for the Environment's 2008 publication titled *Coastal hazards and climate change: A guidance manual for local government in New Zealand*.



Policy 24: Identification of coastal hazards

1. Identify areas in the coastal environment that are potentially affected by coastal hazards (including tsunami), giving priority to the identification of areas at high risk of being affected. Hazard risks, over at least 100 years, are to be assessed having regard to:
   a. physical drivers and processes that cause coastal change including sea level rise;
   b. short-term and long-term natural dynamic fluctuations of erosion and accretion;
   c. geomorphological character;
   d. the potential for inundation of the coastal environment, taking into account potential sources, inundation pathways and overland extent;
   e. cumulative effects of sea level rise, storm surge and wave height under storm conditions;
   f. influences that humans have had or are having on the coast;
   g. the extent and permanence of built development; and
   h. the effects of climate change on:
      i. matters (a) to (g) above;
      ii. storm frequency, intensity and surges; and
      iii. coastal sediment dynamics;

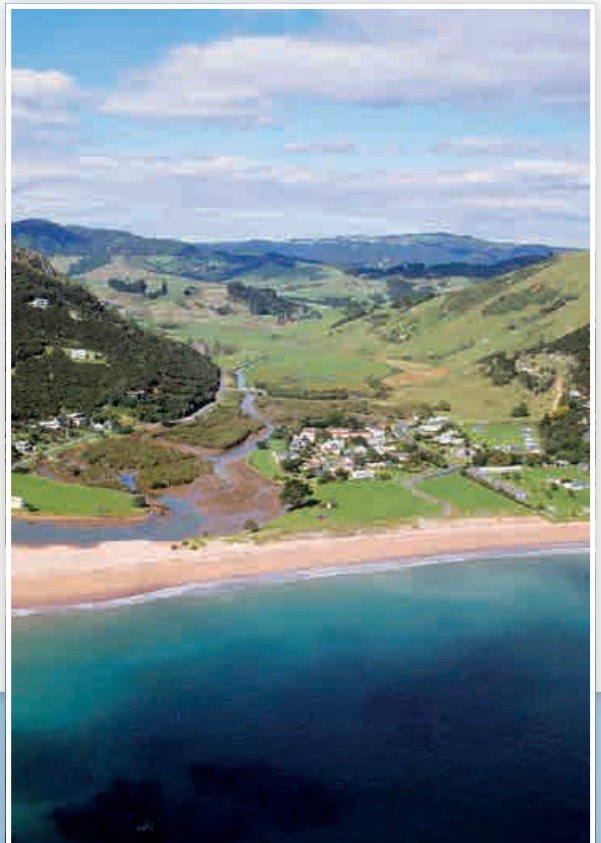
   taking into account national guidance and the best available information on the likely effects of climate change on the region or district.

POLICY (continued)

New development

Policy 25 of the NZCPS 2010 addresses subdivision, use and development generally (with Policy 27 specifically addressing strategies for significant existing development). It begins with a general direction that councils should avoid increasing the risk of social, environment and economic harm from coastal hazards.

Policy 25(b) then more specifically directs that changes in land use (which includes subdivision and new development) which increase the risk of adverse effects from coastal hazards should be avoided. Therefore new development should be located away from areas which will potentially be affected by coastal hazards over the next 100 years.



Tauranga Bay, Far North District

Policy 25: Subdivision, use, and development in areas of coastal hazard risk

In areas potentially affected by coastal hazards over at least the next 100 years:

a. avoid increasing the risk of social, environmental and economic harm from coastal hazards;

b. avoid redevelopment, or change in land use, that would increase the risk of adverse effects from coastal hazards;

c. encourage redevelopment, or change in land use, where that would reduce the risk of adverse effects from coastal hazards, including managed retreat by relocation or removal of existing structures or their abandonment in extreme circumstances, and designing for relocatability or recoverability from hazard events;

d. encourage the location of infrastructure away from areas of hazard risk where practicable;

e. discourage hard protection structures and promote the use of alternatives to them, including natural defences; and

f. consider the potential effects of tsunami and how to avoid or mitigate them.

Redevelopment

In relation to existing development, the management response directed by the NZCPS 2010 is more complex. Local authorities are directed through Policy 25 to "avoid" redevelopment or changes in land use that would increase the risk of adverse effects from coastal hazards and to "encourage" redevelopment or change in land use where that would reduce the risk of adverse effects from coastal hazards. This includes promoting managed retreat by relocation or abandonment, designing for relocatability or recoverability from hazard events, and discouraging hard protection structures. Where existing development is significant, there is also guidance on long term strategies in Policy 27.

Significant existing development

Policy 27 contains detailed guidance on developing strategies for areas of "significant" existing development that are likely to be affected by coastal hazards. It directs local authorities to consider a range of options for reducing coastal hazard risk over the long term, including relocation or removal of existing development. Innovative financial or insurance options could help facilitate this. The Policy recognises that hard protection structures may be the only practical means to protect existing infrastructure of "national or regional importance", but also recognises the environmental and social costs of permitting hard protection structures to protect private property.

Kohimarama, Auckland

Policy 27: Strategies for protecting significant existing development from coastal hazard risk

1. In areas of significant existing development likely to be affected by coastal hazards, the range of options for reducing coastal hazard risk that should be assessed includes:
    a. promoting and identifying long-term sustainable risk reduction approaches including the relocation or removal of existing development or structures at risk;
    b. identifying the consequences of potential strategic options relative to the option of "do-nothing";
    c. recognising that hard protection structures may be the only practical means to protect existing infrastructure of national or regional importance, to sustain the potential of built physical resources to meet the reasonably foreseeable needs of future generations;
    d. recognising and considering the environmental and social costs of permitting hard protection structures to protect private property; and
    e. identifying and planning for transition mechanisms and timeframes for moving to more sustainable approaches.
2. In evaluating options under (1):
    a. focus on approaches to risk management that reduce the need for hard protection structures and similar engineering interventions;
    b. take into account the nature of the coastal hazard risk and how it might change over at least a 100-year timeframe, including the expected effects of climate change; and
    c. evaluate the likely costs and benefits of any proposed coastal hazard risk reduction options.
3. Where hard protection structures are considered to be necessary, ensure that the form and location of any structures are designed to minimise adverse effects on the coastal environment.
4. Hard protection structures, where considered necessary to protect private assets, should not be located on public land if there is no significant public or environmental benefit in doing so.

Natural defences

The NZCPS 2010 recognises the importance of natural defences in reducing coastal hazards. Such natural defences are specified to include beaches, estuaries, wetlands, intertidal areas, coastal vegetation, dunes and barrier islands. Policy 26 requires local authorities to provide for the protection, restoration and enhancement of natural defences. Regional policy statements and plans should identify natural features which provide a natural defence to erosion and/or inundation and objectives, policies and rules should ensure they are protected. No new development should be allowed if it will have negative impacts on natural defence systems such as dunes, and the revegetation of dune areas should be encouraged.

Policy 26: Natural defences against coastal hazards

1. Provide where appropriate for the protection, restoration or enhancement of natural defences that protect coastal land uses, or sites of significant biodiversity, cultural or historic heritage or geological value, from coastal hazards.
2. Recognise that such natural defences include beaches, estuaries, wetlands, intertidal areas, coastal vegetation, dunes and barrier islands.

Ocean Beach, Kawhia

POLICY (continued)

Hard protection structures

The NZCPS 2010 contains a number of provisions relating to hard protection methods. Policy 25(e) requires local authorities to discourage the use of hard protection structures and to promote the use of alternatives. Policies 27(3) and (4) specifically address the design and location of hard protection structures and direct that they should not be built on public land for the purpose of protecting private property if there is no significant public or environmental benefit in doing so. Where hard protection structures are considered necessary, the policies direct that they are to be designed to minimise adverse effects on the coastal environment.

Policies 25, 26 and 27 suggest that, in general, hard protection structures should not be allowed (or at least should be discouraged and reliance on them reduced over time) except where they are necessary to protect "existing" infrastructure of "regional or national importance". As a result, objectives, policies and rules should ensure that hard protection works will be allowed only after all other options have been considered and proved impractical. They are a hazard response that should be mainly reserved for regionally or nationally significant infrastructure. At the time of writing, the Department of Conservation guidance on implementing this policy, which may provide additional information on how to decide whether a structure fits into these categories, is in the process of being prepared.

Other policies in the NZCPS 2010 support this interpretation. Policy 13 directs the preservation of the natural character of the coastal environment and its protection from inappropriate subdivision, use and development, which is discussed further in Chapter 5. Policy 19 recognises the public expectation of, and need for, walking access to and along the coast and directs decision makers to avoid, remedy or mitigate any loss of public walking access resulting from subdivision, use or development, which is discussed further in Chapter 10.

MANAGEMENT APPROACHES

The new management approach to coastal hazards involves a hierarchy of responses, with a preference for avoiding coastal hazards in the first place. Hard coastal protection is now considered to be a last resort. There are a number of key considerations when determining how to manage coastal hazard risks:

- Public versus private: There is a strong tension between the private interests of property owners and the wider public interest in maintaining the character and amenity of the coast
- Short-term cost versus long-term benefit: Managed retreat is an important coastal hazard management tool. Managed retreat has considerable shorter term costs including the expense of relocation and the loss of valuable land. However, it has significant long term benefits including avoiding future coastal hazard risks and costs, preserving the natural character of the coast, and maintaining public access to it
- Reversible versus irreversible effects: Tsunami and storm surges can have significant adverse effects. However, with significant expenditure the effects are generally reversible (as with river floods). In contrast, the effects of erosion and subsidence are often not reversible and attempts to protect property from ongoing erosion will involve ever-increasing expenditure into the future. Therefore, the long-term management options are retreat or increasingly expensive protection works (which will also result in other adverse effects and costs). The increasing financial costs of protecting infrastructure and property in a climate changing world is a particularly significant issue for New Zealand with its small population and very long coastline
- Different standards: The NZCPS 2010 policies do distinguish between new development, existing development and nationally and regionally significant infrastructure. How the hierarchy of management options is applied should differ depending on the type of development involved

Three main management approaches can be adopted in response to the threat of coastal erosion or inundation: managed retreat, adaptation and defence. All of these management approaches can involve the shorter term or longer term use of natural defences (including soft engineering works to enhance natural defences) and hard protection structures.

Managed retreat

Managed retreat is a planned and long term movement of coastal development out of coastal hazard areas, particularly where there is a long term trend of erosion and a retreating coastline. More coastlines will be retreating in the future as climate change progresses, sometimes because of increased storminess, as well as sea-level rise.

Managed retreat can be defined simply as any strategic decision to retreat in the face of a coastal hazard. This usually involves withdrawing, relocating or abandoning assets that are at risk and may involve private and/or public assets.[6]

This approach also includes preventing new development in areas that may be threatened by coastal hazards and ensuring that green-field sites are developed so that a sufficient buffer is incorporated between the sea and the development. From a resource management perspective, this is the preferred option as it preserves the natural character of the coast by allowing estuaries, marshes and beaches to migrate naturally and to maintain their ecological, recreational and cultural functions. It also avoids the high and ever-increasing costs of building and maintaining hard protection works as sea level rises.

Adaptation

Adaptation involves continuing to use coastal land subject to natural hazards, but in a manner which responds to the changing conditions. This may include raising infrastructure such as roads, railways and buildings, using relocatable buildings and redesigning drainage and sewerage networks to accommodate rising sea levels. Managed retreat can also be a component of adaptation.

Soft protection

Dunes (and other natural features) provide a buffer against storms and rising sea levels and are therefore a natural defence to coastal hazards. However, coastal dunes are one of the most degraded natural ecosystems in New Zealand. Dune restoration may involve recontouring, revegetation, removal of pest flora and fauna, and fencing (as well as educating local communities on how to best care for their dunes) in order to restore a cover of native sand-binding vegetation on the seaward face of the dune.

These methods can be very effective in restoring dunes and reducing erosion problems. Some councils are encouraging this work through voluntary care programmes. Dune restoration is a critical tool for managing coastal hazards. It is far less costly than hard engineering options and, when well planned, need not have negative effects on natural character and amenity.

Hard protection

Seawalls are a common response to coastal erosion. Although they temporarily stop erosion inland of the seawall and help to hold the shoreline position, they exacerbate erosion in front of the wall, at each end of the wall and downstream from the wall. Instead of the coastline naturally migrating landward in response to erosion, when a seawall is in place, erosion causes the beach and intertidal area to progressively disappear. In the long term, this can lead to parts of the coast protruding seaward relative to surrounding areas, and accelerated erosion once sea walls are removed or fail.

The Environment Court has held that it is inappropriate for hard protection works to have permitted activity status as there is clear evidence such works result in coastal squeeze and increased erosion in adjacent areas.[7] Regional policy statements and plans should require that hard protection structures have an activity status ranging between restricted discretionary and prohibited, depending on the particular circumstances, to ensure that the local authority has full control over the erection of any hard protection structures.

Hard protection structures are more likely to be considered appropriate where they are necessary to protect nationally and regionally significant infrastructure such as ports, national roadways or train lines. In all cases, hard engineering methods should only be permitted as part of a long-term hazard management strategy that represents the best practicable option for the future.

Buffalo Beach, Whitianga, Thames-Coromandel District

BEST PRACTICE DESIGN ELEMENTS

Development designed to avoid the risk of harm from coastal hazards can include the following elements:

PROVIDE A GENEROUS COASTAL BUFFER

The establishment of a generous coastal buffer should be considered as an integral part of the development. It should be sufficient in size to ensure that any new development will not be affected by coastal hazards for at least the next 100 years. Where subdivision, important infrastructure or public safety is involved, the timeframe (and hence the buffer) should be even larger. A useful resource for determining these coastal buffers is *Defining coastal hazard zones for setback lines – A guide to good practice* prepared by NIWA.[8]

Key points to consider:

- Factor in potential coastal hazards over at least the next 100 years when deciding the location of developments
- Locate buildings well back from foreshore edges
- Avoid hard structures where at all possible

Undesirable example Omaha North, Auckland

The lowering of frontal dunes to enhance views, and construction of houses close to the coastal edge, significantly increased the risk of coastal erosion

Desirable example Omaha South, Auckland

A wide setback from the coastal edge, and retention of the frontal dune, has reduced the risk of coastal erosion for these properties

BEST PRACTICE DESIGN ELEMENTS (continued)

AVOID ADVERSE IMPACTS ON NATURAL DEFENCE SYSTEMS

It is important to avoid any negative impacts on natural defence systems (such as dunes or beachface dynamics), as well as to protect and vegetate dune areas.

Key points to consider:

- Retain the form and functioning of natural landforms including dune systems
- Maintain natural vegetation as a buffer
- Use native sand binding plants on dunes
- Fence sensitive areas off
- Provide formed public accessways over dunes to the beach

Undesirable example Mount Maunganui, Tauranga

The replacement of indigenous vegetation with introduced grasses, and construction of walkways and roads on top of the dunes, has reduced the effectiveness of these natural defence systems

Desirable example Papamoa, Tauranga

Replanting of indigenous dune species, has helped to naturally trap the sand, rebuilding these natural defence systems with formed public accessways reducing trampling of the vegetation

BEST PRACTICE DESIGN ELEMENTS (continued)

USE SYMPATHETIC DESIGNS FOR PROTECTION STRUCTURES

Soft stabilisation measures should be used as a priority when existing urban areas are subject to natural coastal hazards. Where hard protection works are constructed, designs which minimise impacts on other areas of the coast, and on landscapes and natural character, should be adopted.

Key points to consider:

- Minimise impacts on coastal features and coastal processes through the choice of hard protection structure (such as groyne, offshore breakwater, buried back-stop wall or seawall)
- Minimise impacts on landscape, amenity and natural character by careful choice of location and design, including by ensuring the scale and material of the structure fits in as much as possible with the surrounding environment (for example by using a subsurface groyne, seawall set back into private property or seawall buried back into the dune)
- Use a design for a hard structure which matches the surrounding natural environment and geology as much as possible

Undesirable example St Clair Beach, Dunedin

The seawall design does little to blend this large structure into the natural coastal environment, reducing the amenity of the beach

Desirable example Kohimarama Beach, Auckland

Designing a groyne to look like a natural rocky platform provides a visually appealing hard protection structure

BEST PRACTICE PLANNING ELEMENTS

Regional and district plans can include the following in order to address natural coastal hazards:

IDENTIFY COASTAL HAZARDS AND ASSESS COASTAL HAZARD RISKS

The NZCPS 2010 requires local authorities to identify areas in the coastal environment that are potentially affected by coastal hazards, and to assess the hazard risks over at least the next 100 years.

Key points to consider:

- Priority is to be given to the identification of areas with a high probability of being affected by hazards
- The effects of climate change must be considered when natural hazard assessments are undertaken
- Hazard assessments should be undertaken by professionals with appropriate expertise and experience or the results will not be robust under vigorous community challenge
- The Environment Court has accepted that a 100 year timeframe is appropriate for coastal planning purposes.[9] The NZCPS 2010 now directs that assessments identify areas that will potentially be affected by coastal hazards over "at least" the next 100 years. This gives scope for local authorities to adopt a longer timeframe. The timeframe which is appropriate will depend on the type of development

Example Bay of Plenty Regional Council coastal hazard identification

The method of identifying coastal hazard risk adopted by the Bay of Plenty Regional Council uses three categories: acceptable, tolerable and intolerable. This approach aligns with case law which has emphasised, in the context of coastal hazards, that it is not the role of the Environment Court to ensure the activity can proceed with no risk of adverse effects. Instead, any risk must be assessed to determine whether it is acceptable. [10]

Pukehina Beach, Bay of Plenty

BEST PRACTICE PLANNING ELEMENTS (continued)

MAP COASTAL HAZARD ZONES

Robust forward planning is important in coastal hazard management. Once development has occurred both protection and managed retreat can be very expensive and difficult options. If development does not occur in coastal hazard risk areas, or occurs with managed retreat in mind, this will lower the cost of long term adaptation to coastal hazards. A useful resource for determining these coastal buffers is *Defining coastal hazard zones for setback lines – A guide to good practice* prepared by NIWA.[11]

Key points to consider:

- Identify areas where natural hazards exist, through delineation of coastal hazard zones on planning maps
- Create esplanade reserves or esplanade strips to provide some protection against coastal hazards. The benefit of an esplanade strip is that it can be described as a strip of a specified width bounded by the line of mean high water springs, and can therefore move back and forth with the coastline or as sea level rises
- Include provision to review hazard lines regularly (such as every ten years) to adjust for changes in the coastline and scientific knowledge on the likely effects of climate change

Example **Proposed Kāpiti Coast District Plan, Coastal Hazards Maps**

BEST PRACTICE PLANNING ELEMENTS (continued)

INCORPORATE CLIMATE CHANGE STANDARDS INTO REGIONAL POLICY AND PLANS

Regional policy statements and plans should recognise the impact that climate change will have on natural hazards, including rising sea levels and changes in the frequency and intensity of storms.

Key points to consider:

- Include a statement that national guidance and the best available information on the likely effects of climate change (including sea-level rise) will be used for hazard mapping and resource consent processes. Older plans often refer to "the current mid-range estimate of the IPCC". This has the benefit of remaining up-to-date and the Environment Court has endorsed use of the IPCC predictions for planning purposes
- Plans could also refer to the Ministry for the Environment 2008 Guidance Manual advice as well as to "the current estimate of the IPCC", which will allow the plan to reflect the new estimates contained in the fifth IPCC report which is due to be released in 2013-2014

Example Greater Wellington Regional Council - Regional Coastal Plan (2000)

Policy 6.2.5 ensures adequate allowance is made for rising sea levels, waves and currents, storm surge when designing any structure. Reference is made to the best current estimates of the IPCC.

Ōwhiro Bay, Wellington

BEST PRACTICE PLANNING ELEMENTS (continued)

SET APPROPRIATE ZONING AND ACTIVITY CLASSIFICATION

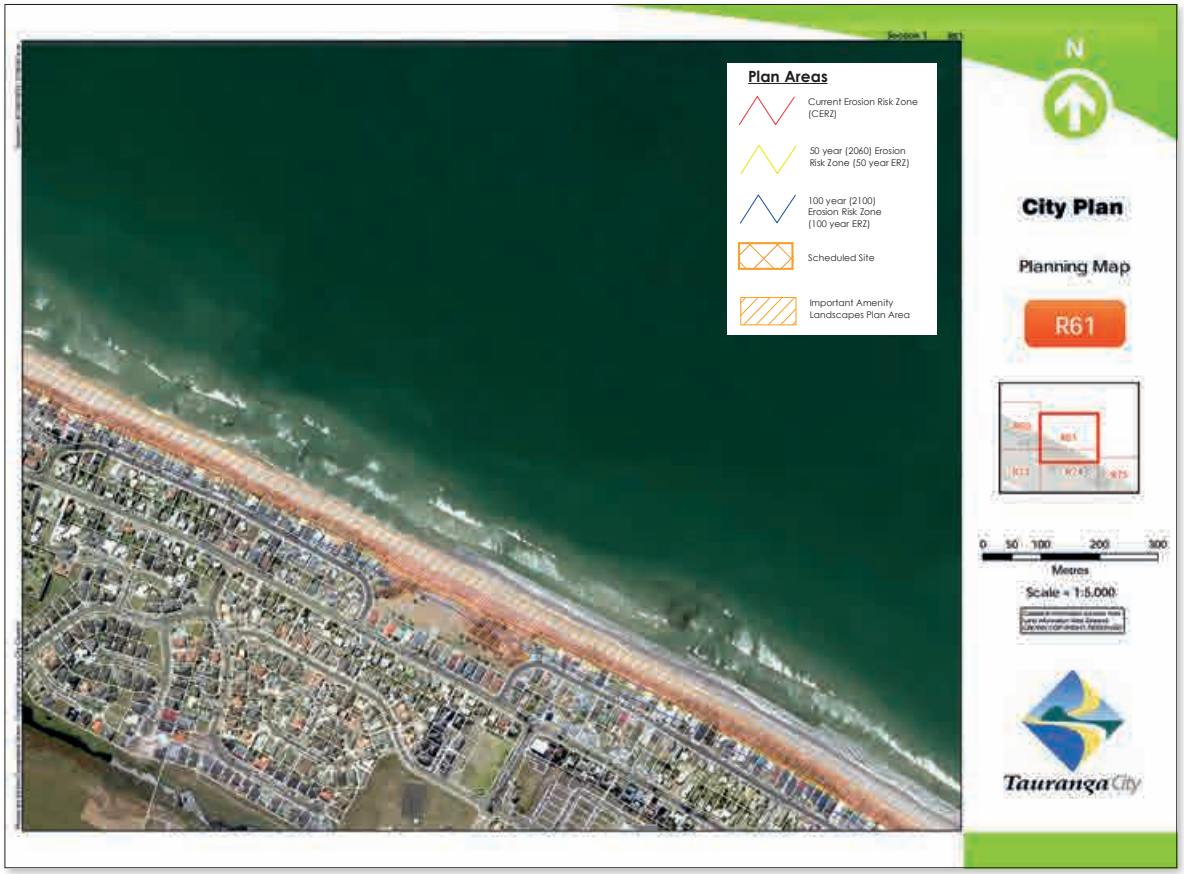
Set rules which classify all redevelopment and new development within coastal hazard zones as at least restricted discretionary so that consent can be refused, where necessary. This discretion could be based on factors such as whether an alternative practicable building platform can be provided outside of the coastal hazard zone.

Key points to consider:

- Adopt a precautionary approach as required by the NZCPS 2010 Policy 3. The Environment Court has supported including a buffer to make allowance for factors which have not been estimated, particularly given the uncertainties in climate change-related estimations
- Use graduated "no-build set-backs" or "erosion risk zones". All redevelopment and new development within these zones should have an activity status ranging from restricted discretionary to prohibited, so that the consent authority has appropriate control over activities in these zones and can refuse consent where necessary
- Apply coastal hazard zones to "future urban areas" to ensure coastal hazards management is in place before development is considered
- Proactively address the cumulative effects of relocatable homes to ensure that ad hoc resource consents do not result in a large number of "relocatable" homes, which are not practically relocatable

Example Tauranga Proposed City Plan Chapter 8 Natural Hazards (November 2012)

Additions to or replacement of existing buildings are restricted discretionary activities in the CHEPA (Coastal Hazard Environment Protection Area) and non-complying activities in the CPPA (Coastal Protection Plan Area). Construction of new dwellings is prohibited in the Current Erosion Risk Zone, restricted discretionary in the rest of the CHEPA, and non-complying in the CPPA.



BEST PRACTICE PLANNING ELEMENTS (continued)

SET APPROPRIATE CLASSIFICATION FOR HARD PROTECTION WORKS

Develop objectives, policies and rules that identify appropriate options for new development and adaptation for existing development.

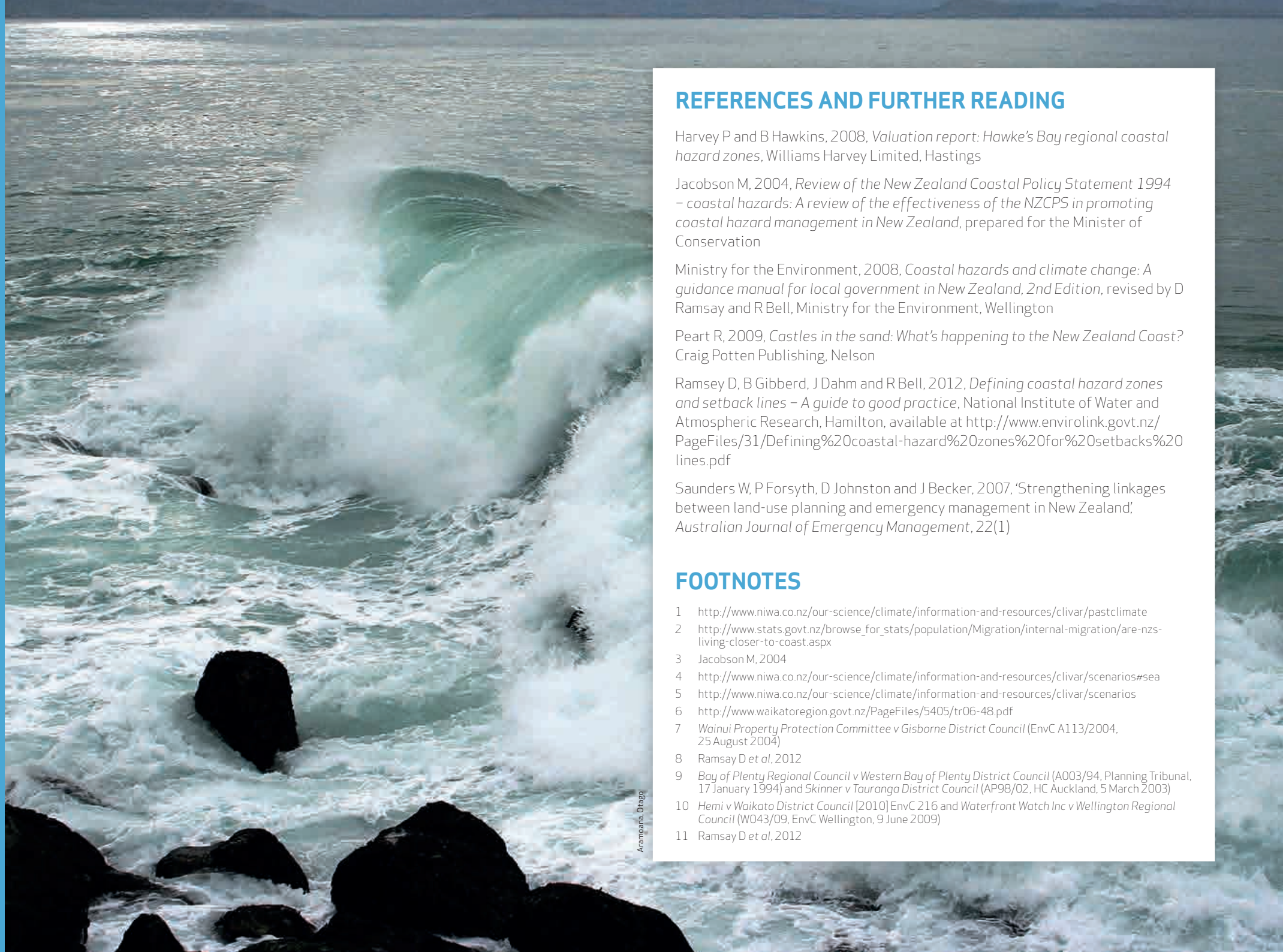
Key points to consider:

- Identify natural systems which provide a natural defence to erosion and/or inundation, and provide objectives, policies and rules to ensure they are protected
- Ensure that hard coastal protection works will only be permitted after all other options have proved impractical

Example Tauranga Proposed City Plan Chapter 8 Natural Hazards (November 2012)

Hard protection works to protect land zoned road and identified as a primary arterial, secondary arterial strategic or collector road are restricted discretionary. Hard protection works for the purpose of protecting private property and land zoned open space are prohibited.

Tauranga, Bay of Plenty



Arampana, Otago

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FOOTNOTES

1 http://www.niwa.co.nz/our-science/climate/information-and-resources/clivar/pastclimate

2 http://www.stats.govt.nz/browse_for_stats/population/Migration/internal-migration/are-nzs-living-closer-to-coast.aspx

3 Jacobson M, 2004

4 http://www.niwa.co.nz/our-science/climate/information-and-resources/clivar/scenarios#sea

5 http://www.niwa.co.nz/our-science/climate/information-and-resources/clivar/scenarios

6 http://www.waikatoregion.govt.nz/PageFiles/5405/tr06-48.pdf

7 *Wainui Property Protection Committee v Gisborne District Council* (EnvC A113/2004, 25 August 2004)

8 Ramsay D *et al*, 2012

9 *Bay of Plenty Regional Council v Western Bay of Plenty District Council* (A003/94, Planning Tribunal, 17 January 1994) and *Skinner v Tauranga District Council* (AP98/02, HC Auckland, 5 March 2003)

10 *Hemi v Waikato District Council* [2010] EnvC 216 and *Waterfront Watch Inc v Wellington Regional Council* (W043/09, EnvC Wellington, 9 June 2009)

11 Ramsay D *et al*, 2012

Kaiteriteri Beach, Tasman District

10 MAINTAINING AND ENHANCING PUBLIC ACCESS

IN THIS SECTION...

INTRODUCTION

New Zealand's legislative history of providing for public access to the coast is complex. There never has been an absolute requirement for the protection of what is commonly referred to as the "Queen's chain", a strip of public land of about 20 metres wide along the coastline. But over the years, legislation has improved, and an esplanade reserve or strip is now usually created when land is subdivided into small lots for urban development. In addition, there are still many "paper" roads running to and along the coast which were surveyed off in the early days of European settlement, and many of these enable members of the public to access the coast.

The amount of land adjoining the sea, that is currently held in public ownership, varies between regions. It has been increasing over time as coastal land is subdivided and esplanade reserves or strips are created. However, even if coastal land is in public ownership, it does not necessarily always provide effective public access to the coastal edge for a variety of reasons. In recent decades, the surge in coastal development, the increasing popularity of rural-residential living, changes in land ownership and use, and advancing shorelines due to rising sea levels, have in some places impacted on the ability of the public to access the coastal edge.

Mansion House Bay, Kawau Island, Hauraki Gulf

VISION

The RMA identifies the "maintenance and enhancement of public access to and along the coastal marine area" as a matter of national importance and requires those exercising functions and powers under the RMA to recognise and provide for this matter.[1] It therefore should be accorded significant priority in decision-making. The legislative intent is that public access to and along the coast will increase over time. The RMA also specifically mandates that a coastal policy statement should state objectives and policies about the "national priorities for maintaining and enhancing public access to and along the coastal marine area".

The Board of Inquiry Report found that, in many places, little or no priority was given to protecting public open space and access despite the provisions of the RMA.[2] As a result, public access to the coastal environment was identified as one of the seven national priority areas for the revised NZCPS. Accordingly the NZCPS 2010 contains key provisions relating to the provision and improvement of opportunities for the public to access the coastal marine area.

Objective 4 seeks to maintain and enhance the public open space qualities and recreational opportunities of the coastal environment. There is an expectation that public walking access will be provided without charge and that it should only be denied for "exceptional" reasons. Where such access is not practicable, alternative linking routes close to the coastal marine area should be provided. The objective also highlights the need to ensure that public access is maintained, even when the coastal marine area advances inland due to coastal processes. Achieving this objective is likely to require councils to take a forward-looking, proactive approach to the provision of public access in the coastal environment.

Objective 4

To maintain and enhance the public open space qualities and recreation opportunities of the coastal environment by:

- recognising that the coastal marine area is an extensive area of public space for the public to use and enjoy;
- maintaining and enhancing public walking access to and along the coastal marine area without charge, and where there are exceptional reasons that mean this is not practicable providing alternative linking access close to the coastal marine area; and
- recognising the potential for coastal processes, including those likely to be affected by climate change, to restrict access to the coastal environment and the need to ensure that public access is maintained even when the coastal marine area advances inland.

ISSUES

There are a number of factors that are increasing the challenges faced by councils and other agencies in providing appropriate public access to the coastal environment. These include the increasing population, changes in land ownership, subdivision of rural coastal land, interventions required to manage coastal hazard risks and conflicts between coastal users. Provision of public access to the coast can be restricted by a number of issues, which are summarised below:

Figure 10.1 Summary of restrictions to public access

Type	Examples
Physical barriers	• Barricades in the form of security gates
	• The inclusion of private roads within coastal subdivisions
	• The construction of seawalls leading to coastal squeeze at high tide
	• The construction of groynes
	• Erosion of esplanade and road reserves by coastal processes
	• Difficult terrain, such as very steep or rugged public land preventing access
	• Encroachment by landowners onto reserve areas in the form of private gardens and structures
Financial disincentives	• Costs for councils or landowners to manage and maintain reserves
	• Costs to comply with any health and safety requirements
	• Cost of compensation to landowners for purchase of high value coastal land as reserves
Other factors	• Restricting public access to protect natural resources and environmental values
	• Restricting public access to protect culturally sensitive areas and values
	• Loss of formal access when coastal farms are subdivided into lifestyle sections and campgrounds are developed
	• Changing ownership patterns and less desire by landowners to provide voluntary access
	• Lack of signage or information on where public access is available
	• Loss of publicly-available access facilities, such as camping grounds

POLICY

Policy 19 of the NZCPS 2010 is the most relevant to public access. It recognises that members of the public have an expectation of, and need for, walking access along the coast that is practical, free of charge and safe.

Policy 19: Walking access

1. Recognise the public expectation of and need for walking access to and along the coast that is practical, free of charge and safe for pedestrian use.
2. Maintain and enhance public walking access to, along and adjacent to the coastal marine area, including by:
   a. identifying how information on where the public have walking access will be made publicly available;
   b. avoiding, remedying or mitigating any loss of public walking access resulting from subdivision, use, or development; and
   c. identifying opportunities to enhance or restore public walking access, for example where:
      i. connections between existing public areas can be provided; or
      ii. improving access would promote outdoor recreation; or
      iii. physical access for people with disabilities is desirable; or
      iv. the long-term availability of public access is threatened by erosion or sea level rise; or
      v. access to areas or sites of historic or cultural significance is important; or
      vi. subdivision, use, or development of land adjacent to the coastal marine area has reduced public access, or has the potential to do so.
3. Only impose a restriction on public walking access to, along or adjacent to the coastal marine area where such a restriction is necessary:
   a. to protect threatened indigenous species; or
   b. to protect dunes, estuaries and other sensitive natural areas or habitats; or
   c. to protect sites and activities of cultural value to Māori; or
   d. to protect historic heritage; or
   e. to protect public health or safety; or
   f. to avoid or reduce conflict between public uses of the coastal marine area and its margins; or
   g. for temporary activities or special events; or
   h. for defence purposes in accordance with the Defence Act 1990; or
   i. to ensure a level of security consistent with the purpose of a resource consent; or
   j. in other exceptional circumstances sufficient to justify the restriction.
4. Before imposing any restriction under (3), consider and where practicable provide for alternative routes that are available to the public free of charge at all times.

The Policy directs that local authorities should actively seek to enhance or restore public walking access to and along the coast. It identifies a number of examples where local authorities should specifically seek to achieve this. These include circumstances where:

- Connections between existing public areas can be provided
- Public access is threatened by erosion or sea level rise
- Development of land adjacent to the coastal marine area has reduced public access
- Improving access would assist outdoor recreation
- Improved access can be provided for people with physical disabilities
- Access is required to areas of historic or cultural significance

The Department of Conservation's implementation guidance indicates that Policy 19 will require "positive implementation through policy statements, plans and decision-making". This should result in more substantial and consistent provisions in plans to ensure on-going public walking access. It should also only see restrictions on public access applied after careful consideration.[3] The Department of Conservation guidance provides some useful information about both regulatory and non-regulatory tools which can be used to maintain and enhance public access to coastal areas and can be found at

http://www.doc.govt.nz/Documents/conservation/marine-and-coastal/coastal-management/guidance/policy-19.pdf.

Protecting public access

One of the ways in which the RMA protects public access to and along the coast is through requiring the creation of esplanade reserves and esplanade strips on subdivision of land. When land is subdivided to create an allotment of less than four hectares, an esplanade reserve must be set aside along mean high water springs, along the bank of any river or along the margin of any lake,[4] unless a rule in a district plan or resource consent provides otherwise. The esplanade reserve must be 20 metres in width. Esplanade reserves are classified as reserves under the Reserves Act 1977 and land ownership is transferred to the territorial authority.

District councils retain the ability to waive this requirement or to reduce the width of the esplanade reserve required, through a rule in a district plan. This discretion is expressly to be exercised "subject to Part 2" of the RMA and having regard to the purposes of esplanade reserves. District Councils can also require, through a rule in a district plan, that an esplanade reserve of a width greater than 20 metres be set aside, or that an esplanade reserve is required when allotments of four hectares or more are created. However, compensation must be paid for the extra land required.

Alternatively, district councils can include a rule in a district plan that requires, instead of an esplanade reserve, that an esplanade strip be created of a specified width. Esplanade strips are created by the registration of an instrument, agreed between the territorial authority and the subdividing owner, on the property title. Although this serves to protect the public interest in the strip, the land remains in private ownership.

The purposes of esplanade reserves and strips are to:

- Protect conservation values such as through maintaining or enhancing the natural functioning of the adjacent sea, river or lake, water quality, aquatic habitats and other natural values, as well as mitigating natural hazards
- Enable public access to or along any sea, river or lake
- Enable public recreational use where the use is compatible with conservation values

Key differences between esplanade reserves and strips are:

- When an esplanade reserve is created, the reserve land is vested in the local authority, which manages the area. When an esplanade strip is created, ownership of the land is retained by the landowner and the public access right is registered on the certificate of title
- Landowners can apply to vary or cancel an esplanade strip, whereas esplanade reserves cannot be varied or cancelled
- Esplanade strips move with the location of high tide, whereas the width of esplanade reserves can be eroded by natural processes
- Esplanade strips are often not marked on planning maps, so the public can be unaware of their presence, whereas esplanade reserves are marked and often promoted to the public

These concepts are discussed in more detail in EDS's paper on protecting and enhancing public access to the coast, which is available at www.eds.org.nz.

Policy 18 of the NZPCS 2010 recognises the important role that esplanade reserves and strips have in contributing towards meeting the needs that people have for open space and public access on the coast.

Policy 18: Public open space

Recognise the need for public open space within and adjacent to the coastal marine area, for public use and appreciation including active and passive recreation, and provide for such public open space, including by:

a. ensuring that the location and treatment of public open space is compatible with the natural character, natural features and landscapes, and amenity values of the coastal environment;

b. taking account of future need for public open space within and adjacent to the coastal marine area, including in and close to cities, towns and other settlements;

c. maintaining and enhancing walking access linkages between public open space areas in the coastal environment;

d. considering the likely impact of coastal processes and climate change so as not to compromise the ability of future generations to have access to public open space; and

e. recognising the important role that esplanade reserves and strips can have in contributing to meeting public open space needs.

There are many factors that impact on the ability to provide public access to the coastal environment and it is important that access integrates well with, and does not impact on, the natural environment. Policy 18 recognises these drivers and directs councils to take a strategic approach to identifying future public open space and access needs.

POLICY (continued)

Controlling vehicle access

Policy 20 specifically controls the use of vehicles, apart from emergency vehicles, on beaches, the foreshore, the seabed and adjacent public land in circumstances where specified adverse effects may result. These include effects on the natural environment such as damage to dune systems and processes. It also includes harm to ecological systems or to indigenous flora and fauna, for example marine mammal and bird habitats or breeding areas and shellfish beds. In addition, vehicle access is to be controlled where there might be adverse effects on safety and cultural values, including danger to other beach users; disturbance of the peaceful enjoyment of the beach environment; damage to historic heritage; damage to the habitats of fisheries resources of significance to customary, commercial or recreational users; and damage to sites of significance to tangata whenua.

Riversdale Beach, Wairarapa

Policy 20: Vehicle access

1. Control use of vehicles, apart from emergency vehicles, on beaches, foreshore, seabed and adjacent public land where:
   a. damage to dune or other geological systems and processes; or
   b. harm to ecological systems or to indigenous flora and fauna, for example marine mammal and bird habitats or breeding areas and shellfish beds; or
   c. danger to other beach users; or
   d. disturbance of the peaceful enjoyment of the beach environment; or
   e. damage to historic heritage; or
   f. damage to the habitats of fisheries resources of significance to customary, commercial or recreational users; or
   g. damage to sites of significance to tangata whenua;

   might result.
2. Identify the locations where vehicular access is required for boat launching, or as the only practicable means of access to private property or public facilities, or for the operation of existing commercial activities, and make appropriate provision for such access.
3. Identify any areas where and times when recreational vehicular use on beaches, foreshore and seabed may be permitted, with or without restriction as to type of vehicle, without a likelihood of any of (1)(a) to (g) occurring.

However the Policy requires identification of any areas where, and times when, recreational vehicular use on beaches, foreshore and seabed may be permitted without a likelihood of any of these effects occurring. Therefore the Policy prioritises environmental, safety and cultural concerns over recreational vehicle use on beaches. Where vehicular access is required for boat launching, or as the only practicable means of access to private property or public facilities, or for the operation of existing commercial activities, Policy 20 requires identification of such areas, and appropriate provision to be made for such access.

Protecting access to surf breaks

The NZCPS 2010 identifies the need to protect nationally significant surf breaks (Policy 16) by ensuring that activities do not adversely affect them and that other activities do not impact on the access to and use of the surf breaks. Seventeen locations of surf breaks of national significance are listed in Schedule 1. Policy 13(2)(c) and 15 are also relevant as surf breaks are part of the natural character of the coastal environment and are natural features within the seascape.

Wainui Beach, Gisborne

Policy 16: Surf breaks of national significance

Protect the surf breaks of national significance for surfing listed in Schedule 1, by:

a. ensuring that activities in the coastal environment do not adversely affect the surf breaks; and

b. avoiding adverse effects of other activities on access to, and use and enjoyment of the surf breaks.

The definition of "surf break" in the NZCPS 2010 is:

> A natural feature that is comprised of swell, currents, water levels, seabed morphology, and wind. The hydrodynamic character of the ocean (swell, currents and water levels) combines with seabed morphology and winds to give rise to a "surfable wave". A surf break includes the "swell corridor" through which the swell travels, and the morphology of the seabed of that wave corridor, through to the point where waves created by the swell dissipate and become non-surfable. "Swell corridor" means the region offshore of a surf break where ocean swell travels and transforms to a "surfable wave". "Surfable wave" means a wave that can be caught and ridden by a surfer. Surfable waves have a wave breaking point that peels along the unbroken wave crest so that the surfer is propelled laterally along the wave crest

Surf breaks are finite resources and ad hoc reactive management risks the loss of these important resources. Surf breaks are surprisingly scarce. New Zealand has 18,000 kilometres of coastline but only 470 recognised surf spots and these places are unevenly distributed around the coastline. Surfing is an activity that is reliant on specific sites whereas other coastal activities are typically not so site-specific. Activities that threaten surf breaks include dredging for access to inner coastal areas and sedimentation.

The Department of Conservation notes in its implementation guidance for Policy 16 that the focus is on ensuring that activities in the coastal environment do not adversely affect surf breaks of national significance, or access to them and their use and enjoyment.[5] The guidance directs councils to map the Schedule 1 surf breaks and swell corridors, for inclusion in resource management plans, along with protective provisions. Councils should also protect public access to surf breaks that are not specifically listed in the NZCPS 2010 but that have significance at a local or regional level.

Other legislation

In addition to the RMA, the Local Government Act 1974, Reserves Act 1977, Conservation Act 1987, Walking Access Act 2008 and Marine and Coastal Area (Takutai Moana) Act 2011 offer tools to provide public access to and along the coast, including through mechanisms such as unformed legal roads, marginal strips, land covenants and setting aside of conservation areas. Access issues often traverse the administrative boundaries of different authorities, as well as private land. Effective management will often require an integrated approach that involves more than one agency and interventions through different statutory tools. While non-statutory tools can also be effective, legally defined access and access controls will be useful to provide certainty to users, landowners and managers.

The protection of public access to the coast is a central theme of the Marine and Coastal Area (Takutai Moana) Act 2011. The purpose of this Act is, in part, to "establish a durable scheme to ensure the protection of the legitimate interests of all New Zealanders in the marine and coastal area of New Zealand". The Act recognises, through the protection of public rights of access, navigation and fishing, the importance of the common marine and coastal area. The legislation provides for the rights of individuals to access and engage in recreation in the marine and coastal area without charge. However, these rights are subject to any wāhi tapu conditions that might be set out in a customary marine title order or an agreement which may prohibit or restrict access to protect wāhi tapu or a wāhi tapu area.

The purpose of the Walking Access Act 2008 is to provide the New Zealand public with free, certain, enduring, and practical walking access to the outdoors, including around the coast, so that the public can enjoy the outdoors. The legislation establishes the New Zealand Walking Access Commission to manage this.

Motukiekie Island, Bay of Islands

BEST PRACTICE DESIGN ELEMENTS

Development design which maintains and enhances coastal public access can include:

PROVIDE EFFECTIVE PUBLIC ACCESS

It is important to provide effectual public access to and along the coast as an integral part of a development

Key points to consider:

- Ensure coastal access points are well marked
- Maintain coastal access land to facilitate pedestrian passage (such as through providing formed pathways or regularly mowing grass)
- Restrict vehicle access to only that which is necessary
- Ensure all potential hazards for walking over private land are clearly identified
- Where is it not practical to provide an esplanade reserve or strip right around the coastline of the property, provide for public access in other ways, such as through the provision of a coastal reserve on part of the property
- Voluntary agreements are an important tool for improving public access over private land and are often much valued by the local community. However, these voluntary agreements can be undermined when ownership changes hands, so should be formalised on the land title where possible
- Require coastal developments to have public rather than private access roads
- Incorporate a number of potential access points to the coast through coastal developments
- Support communities' enjoyment of the coast with appropriate education

Undesirable example Ōpito Bay, Thames-Coromandel District

The owners of this coastal farm have excluded public access to part of the coast

Desirable example Bream Tail, Kaipara District

The developers of this land have made provision for a public walkway around the coastal edge of their property

BEST PRACTICE DESIGN ELEMENTS (continued)

MINIMISE ENCROACHMENT INTO COASTAL RESERVE AREAS

Ensure that private buildings, structures and plantings do not encroach on coastal reserve areas, or create an impression that the public is imposing on the adjacent owners' private land.

Key points to consider:

- Locate buildings well back from the boundary
- Locate living areas on an upper level rather than at the eye-level of a passer-by
- Clearly demarcate the edge between public and private areas

Undesirable example Manly Beach, Whangaparaoa Peninsula, Auckland

This imposing house is located very close to the beachfront, dominating the public space

Desirable example Tutukākā Harbour, Whangarei District

Houses set back from the coastal edge, and fencing and plantings on the private property boundaries, create a clearer delineation between private and public space

BEST PRACTICE PLANNING ELEMENTS

Regional and district policy and plans can include the following in order to enhance public access to and along the coast

MAP EXISTING AND FUTURE PUBLIC ACCESS TO THE COAST

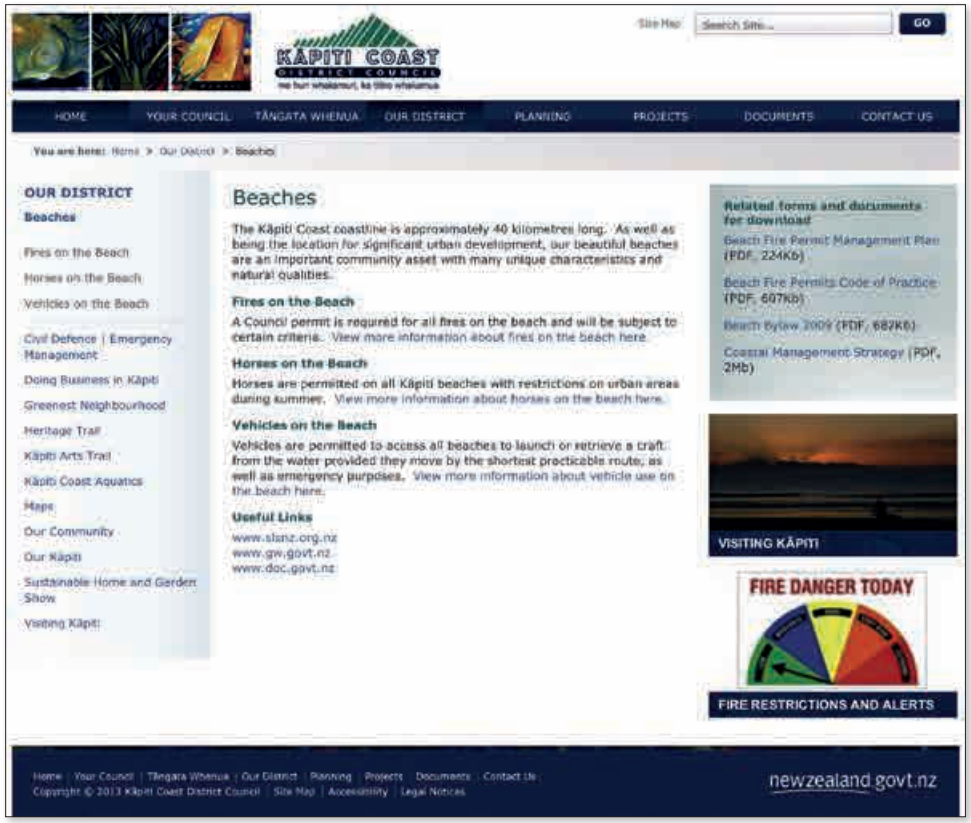
Councils should prepare an inventory of existing public access to the coastal environment. This can be done through GIS mapping. Desirable future public access should be identified and priority areas mapped. Preparing a public coastal access strategy can help bring together all of this information. This work should be done in a collaborative and strategic manner, involving tangata whenua, landowners and access users in the development of key actions to enhance access in the locations identified.

Key locations to identify:

- Where public access should be enhanced
- Where connections between existing public areas can be provided
- Where improving access would promote outdoor recreation
- Where physical access for people with disabilities is desirable
- Where the long-term availability of public access is threatened by erosion or sea-level rise
- Where access to areas or sites of historic or cultural significance is important
- Where subdivision, use, or development of land adjacent to the coastal marine area has reduced public access, or has the potential to do so
- Where public access exists but is not clearly defined or is difficult to identify on the ground
- Where boat launching and access is appropriate
- Where access is needed to public facilities or for commercial operations
- Locations where public access is not desirable in accordance with Policy 19 of the NZCPS 2010

Example Kapiti Coast District Council

As part of the coastal strategy, the district council has prepared information for users on beach access points.



BEST PRACTICE PLANNING ELEMENTS (continued

DEVELOP APPROPRIATE OBJECTIVES, POLICIES AND RULES RELATING TO ESPLANADE RESERVES

The objectives, policies and rules that are concerned with the provision of esplanade reserves and strips in district plans are a key mechanism available to local authorities to enhance public access to and along the coastal marine area when land is subdivided.

Example Hot Water Beach, Thames-Coromandel District

A plan to redevelop the Hot Water Beach campground included subdividing the land that adjoined the Taiwawe Stream into seven residential lots. Normally such a proposal would require the provision of a 20 metre wide esplanade reserve. However the developer sought to reduce this to seven metres, in some places, to increase the size of the sections.[6] The reduction was agreed to by the Thames-Coromandel District Council and the Department of Conservation. The issue over loss of public access opportunity through the reduction of the esplanade reserve width was taken to the Environment Court by the Tairua Environment Society and the Environmental Defence Society. As a compromise, the developer proposed to replant the riparian areas and to provide a public walkway. The Court was concerned about the viability of the planting and required the full 20-metre wide reserve to be provided.

Key points to consider:

- Rules should provide that the presumption of an esplanade reserve of 20 metres in width for allotments less than four hectares should only be waived in exceptional circumstances
- Develop resource consent criteria to improve the provision of access walkways, coastal reserves and esplanade strips
- Territorial authorities should consider setting aside an esplanade reserve of a width greater than 20 metres in areas where there are cliffs or other physical features that result in a 20 metre strip not providing physical access. This may be appropriate where, for example there is a locally significant area of coastline that is highly valued by the public but is currently inaccessible
- Territorial authorities should also consider whether an esplanade reserve should be required when allotments of four hectares or more are created (with required compensation to the landowner provided for)

Hot Water Beach, Thames-Coromandel District

BEST PRACTICE PLANNING ELEMENTS (continued)

DEVELOP APPROPRIATE OBJECTIVES, POLICIES AND RULES TO RESTRICT PUBLIC ACCESS

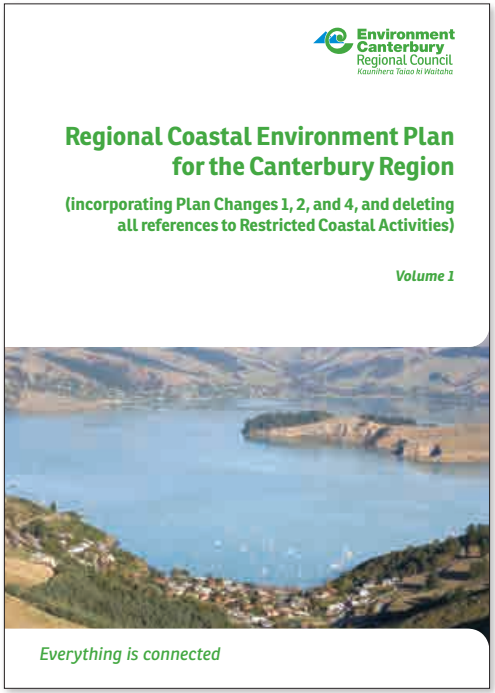
The NZCPS 2010 indicates that restrictions on public access should not be imposed lightly, but they are important where key natural values are at risk. This includes where there are likely to be impacts on ecological systems or indigenous flora or fauna, as well as sites of significance to tangata whenua. In particular, restrictions must be considered where there is conflict between vehicle access to the coast and protecting such values.

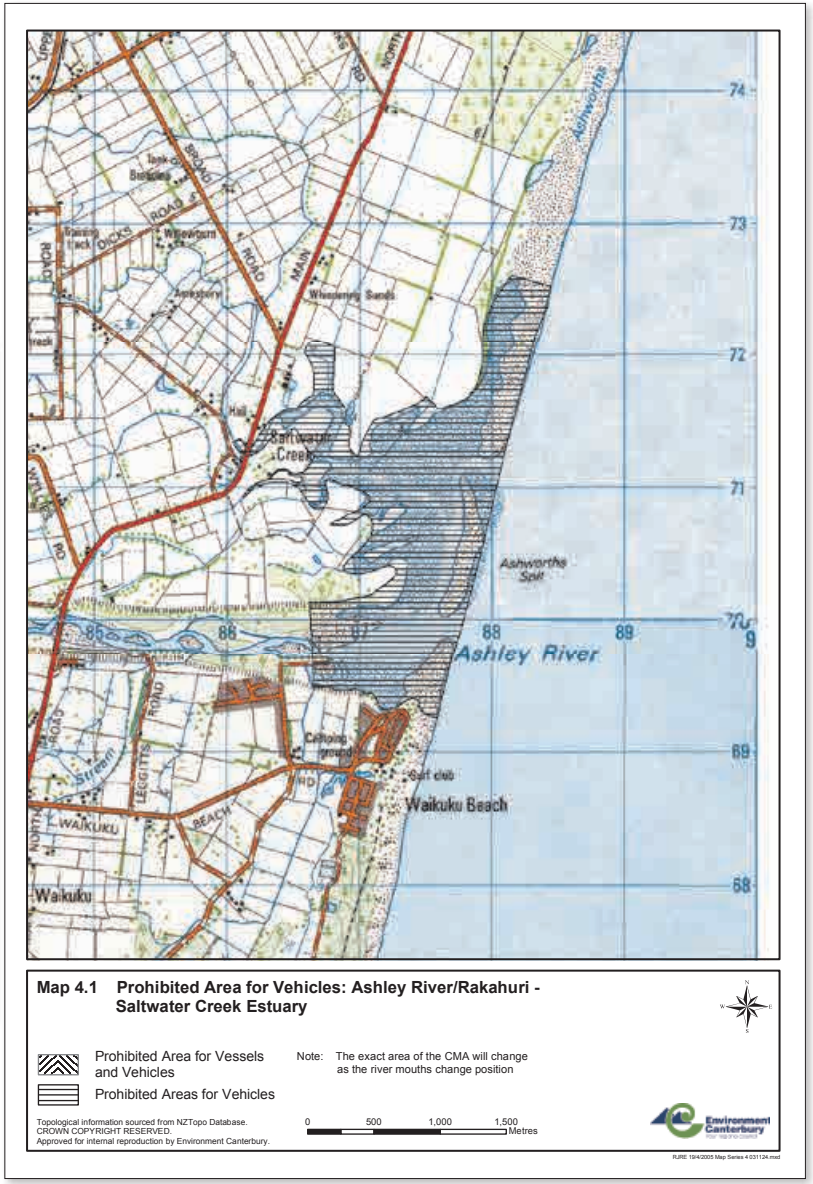
Key points to consider:

- Restrict public access in areas with important natural values or with high ecological sensitivity
- Identify locations where vehicle access is prohibited because it is likely to negatively impact on important environmental or public values
- Identify on planning maps places where public access is prohibited

Example Canterbury Regional Coastal Environment Plan

The Canterbury Regional Coastal Environment Plan includes a map of areas prohibited for use by vehicles in the Ashley-Rakahuri/Saltwater Creek Estuary. By identifying on planning maps these locations, people become more aware of where access is not permitted.





BEST PRACTICE PLANNING ELEMENTS (continued)

SUPPORT NON-STATUTORY PLANNING TOOLS WHICH PROMOTE PUBLIC ACCESS TO THE COAST

There are a number of other tools which can be used to promote public access to and along the coastal environment. These include developing funding criteria.

Key points to consider:

- Provide financial and other incentives for landowners to provide coastal reserves and other access points on their land
- Provide support for the establishment of beach care and coast care restoration groups, which are often involved in enhancing safe public access
- Adequately fund the maintenance and enhancement of council-owned coastal reserve land to ensure public access is maintained
- Provide clear signage for coastal reserve land and public access ways
- Prepare a coastal access strategy to provide a more coordinated and strategic approach to developing or managing access
- Involve tangata whenua, landowners, and access users in the development of key actions to enhance access

Example Far North District Council coastal land purchase fund

The Far North District Council has set up a $4 million fund to enable the purchase of coastal land over five years for the purpose of improving public access. The Council has adopted standard criteria that will make the process of acquisition of coastal land during subdivision of coastal areas much easier and far more consistent. It is hoped that this will also result in more reserves being bought in the future.

Matai Bay, Far North District

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FOOTNOTES

1 section 6(d)
2 Board of Inquiry, 2009
3 Department of Conservation, 2013a
4 For the purposes of this section, a river means a river whose bed has an average width of 3 metres or more where the river flows through or adjoins an allotment; and a lake means a lake whose bed has an area of 8 hectares or more (s 230(4))
5 Department of Conservation, 2013
6 *Tairua Environment Society Inc and Environmental Defence Society Inc v Thames-Coromandel District Council and Wolfe* A97/2004

Long Beach, Oneroa Bay, Bay of Islands

11 PROTECTING MĀORI INTERESTS

Waka, Napier

IN THIS SECTION...

INTRODUCTION

For Māori the coast was traditionally a place to live and to source food, as well as being fundamental to travel and communication. While Māori settlement was not limited to the coast, the coast has always been dominant in living and food-gathering activities. Inland tribes often accessed kaimoana (seafood) by way of putanga (corridors to the coast). Traditional tribal linkages around the coast were maintained well into the twentieth century by communication which was dominated by sea routes.

Māori culture, and its historic and contemporary features, only exist in New Zealand. Poor resource management can lead to the permanent loss of these irreplaceable cultural heritage resources. Important elements of the relationship of Māori with the coastal environment include their ongoing ability to use coastal resources and to associate with important historic sites, natural features and cultural landscapes.

Terraced pā off Puketotara Peninsula, Kaipara Harbour

VISION

Māori culture is given particular recognition by the RMA which requires decision-makers to recognise and provide for the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, wāhi tapu and other taonga[1] and the protection of protected customary rights[2]. In addition, decision-makers must have particular regard to kaitiakitanga[3] and take into account the principles of the Treaty of Waitangi.[4]

However, relationships between tangata whenua and the planning process have not been well provided for in some cases and there needs to be improved protection of the features of the coastal environment that hold special value for tangata whenua. As such, the NZCPS 2010 identifies the Treaty of Waitangi and kaitiakitanga as one of the seven national priorities. It also provides for tangata whenua involvement in the management of the coastal environment through a number of mechanisms. Objective 3 focuses on addressing Māori issues on the coast.

Objective 3

To take account of the principles of the Treaty of Waitangi, recognise the role of tangata whenua as kaitiaki and provide for tangata whenua involvement in management of the coastal environment by:

- recognising the ongoing and enduring relationship of tangata whenua over their lands, rohe and resources;
- promoting meaningful relationships and interactions between tangata whenua and persons exercising functions and powers under the Act;
- incorporating mātauranga Māori into sustainable management practices; and
- recognising and protecting characteristics of the coastal environment that are of special value to tangata whenua.

The objective seeks to recognise the enduring relationship tangata whenua have over their lands, rohe and resources by providing for their more meaningful engagement in coastal decision-making. The objective also seeks greater recognition of Māori knowledge and values. There is an expectation that Māori will be more active participants, particularly in the preparation of cultural impacts assessments and iwi management plans to inform planning documents, as well as incorporating mātauranga Māori into sustainable management practices. Achieving the objective requires an improvement in the interactions between tangata whenua and planning authorities, developers and the community.

There is other legislation that is important to Māori interests in the coastal environment, including the Marine and Coastal Area (Takutai Moana) Act 2011 (which is discussed in Chapter 3), the Te Ture Whenua Maori Act 1993, the Historic Places Act 1993 (discussed in Chapter 12) and the Local Government Act 2002.

Ring ditch pā, Otamatea River, Kaipara

Te Awanui waka held under cover, Tauranga

ISSUES

Pressures and impacts on the relationship between Māori and the coastal environment from development include:

- Sedimentation and pollution of marine areas which impacts on the quality and quantity of kaimoana stocks
- The loss of intertidal areas, through coastal works such as reclamations and seawalls, which reduces the areas where kaimoana can be harvested and modifies coastal landscapes
- The destruction of culturally important sites through earthworks and construction activities, and the vulnerability of culturally important sites to sea-level rise
- The degradation of culturally important natural features and landscapes through inappropriate development
- Rising land prices which can increase rates for marae and papakāinga (development of a communal nature on ancestral land owned by Māori) and make the sale of coastal land attractive

There are also key challenges relating to managing the relationship between Māori and the coastal environment:

- A lack of effective engagement between tangata whenua and councils at the stage of plan and policy statement preparation and review. Currently, participation of tangata whenua is primarily at the resource consent stage which is not proactive and can be time consuming
- A lack of capacity and capability for tangata whenua to participate effectively in resource management processes
- A lack of effective engagement between tangata whenua, users and developers at the resource consent application stage

POLICY

The NZCPS 2010 has two main policies which address the interests of Māori in the coastal environment being Policy 2 (The Treaty of Waitangi, tangata whenua and Māori heritage) and Policy 6(d) (Activities in the coastal environment). Together these policies aim to protect the relationship of Māori with coastal resources, through recognising the cultural importance of ongoing access and use, protecting their association with cultural landscapes and providing for effective development of relationships with councils and developers (also included as part of Policy 17).

Marae on coastal land, Kirikiri inlet, Kaipara Harbour

Policy 2: The Treaty of Waitangi, tangata whenua and Māori

In taking account of the principles of the Treaty of Waitangi (Te Tiriti o Waitangi), and kaitiakitanga, in relation to the coastal environment:

a. recognise that tangata whenua have traditional and continuing cultural relationships with areas of the coastal environment, including places where they have lived and fished for generations;

b. involve iwi authorities or hapū on behalf of tangata whenua in the preparation of regional policy statements, and plans, by undertaking effective consultation with tangata whenua; with such consultation to be early, meaningful, and as far as practicable in accordance with tikanga Māori;

c. with the consent of tangata whenua and as far as practicable in accordance with tikanga Māori, incorporate mātauranga Māori in regional policy statements, in plans, and in the consideration of applications for resource consents, notices of requirement for designation and private plan changes;

d. provide opportunities in appropriate circumstances for Māori involvement in decision making, for example when a consent application or notice of requirement is dealing with cultural localities or issues of cultural significance, and Māori experts, including pūkenga, may have knowledge not otherwise available;

e. take into account any relevant iwi resource management plan and any other relevant planning document recognised by the appropriate iwi authority or hapū and lodged with the council, to the extent that its content has a bearing on resource management issues in the region or district; and

    i. where appropriate incorporate references to, or material from, iwi resource management plans in regional policy statements and in plans; and

    ii. consider providing practical assistance to iwi or hapū who have indicated a wish to develop iwi resource management plans;

f. provide for opportunities for tangata whenua to exercise kaitiakitanga over waters, forests, lands, and fisheries in the coastal environment through such measures as:

    i. bringing cultural understanding to monitoring of natural resources;

    ii. providing appropriate methods for the management, maintenance and protection of the taonga of tangata whenua;

    iii. having regard to regulations, rules or bylaws relating to ensuring sustainability of fisheries resources such as taiāpure, mahinga mātaitai or other non commercial Māori customary fishing;

g. in consultation and collaboration with tangata whenua, working as far as practicable in accordance with tikanga Māori, and recognising that tangata whenua have the right to choose not to identify places or values of historic, cultural or spiritual significance or special value:

    i. recognise the importance of Māori cultural and heritage values through such methods as historic heritage, landscape and cultural impact assessments; and

    ii. provide for the identification, assessment, protection and management of areas or sites of significance or special value to Māori, including by historic analysis and archaeological survey and the development of methods such as alert layers and predictive methodologies for identifying areas of high potential for undiscovered Māori heritage, for example coastal pā or fishing villages.

POLICY (continued)

The Department of Conservation has recently prepared a guidance note for implementing Policy 2 which identifies five key themes for giving effect to the direction of the NZCPS 2010 as far as Māori issues are concerned. These are:

- Kaitiakitanga
- Māori cultural and heritage values, sites and places
- Māori involvement in resource management plans and decision-making
- Consultation
- Taking account of planning documents recognised by iwi and hapū

Use of coastal resources and exercising kaitiakitanga

The balance between land management and impacts on the marine environment are critical to coastal Māori. Gathering of kaimoana, both for sustenance and to provide for visitors, is an integral component of Māori life. When those resources are compromised by inappropriate development, a way of life is also compromised.

The ongoing ability to access specific land-based natural resources is also important and this is recognised by Policy 2. It sets out that methods should be provided to support the management, maintenance and protection of the taonga of tangata whenua. This includes consultation and improving tangata whenua involvement in decision-making. In addition, it is likely to include access to weaving materials and medicinal plants on land which has been alienated from the whanau.

Access may have been available for harvest through informal or assumed permission but this can disappear, as can the resources themselves, as a result of development. Frequently the resources themselves many not be endangered or even rare in the wider district, but the specific location, and the specific whanau access to and use of the location, may be part of a cultural landscape of on-going experience.

The NZCPS 2010 expects that a cultural understanding will be brought to the regulation and monitoring of any natural resources. This includes providing opportunities for tangata whenua to exercise kaitiakitanga over waters, forests, lands and fisheries in the coastal environment which is inherent in Policy 2(f). A number of measures are listed which can be used including bringing cultural understanding to monitoring, providing appropriate methods to protect taonga, and having regard to fisheries sustainability measures applied through taiāpure and mahinga mātaitai.

The Department of Conservation guidance note states that tangata whenua need to have the opportunity to exercise kaitiakitanga in accordance with tikanga Māori. This can be achieved by enabling their on-going involvement with natural resources in their area. Hearing and understanding the views of tangata whenua on the exercise of kaitiakitanga, and letting those views influence decision-making, are good first steps in implementing Policy 2(f).[5] In addition, Policy 6(d) acknowledges the importance of tangata whenua needs for papakāinga, marae and associated developments and requires councils to make appropriate provision for these in planning documents.

Connections with cultural landscapes

The historic elements of a cultural landscape frequently have high significance for tangata whenua and this many not be known to, or fully appreciated by, others. In some cases this cultural linkage can be readily accommodated when development occurs, such as sites containing koiwi (human remains) being preserved. Other relationships may have little physical manifestation, such as the location of an important meeting place, or an ancestor's birthplace, or a place where bodies were cleaned. Although these sites are culturally important, they may be given much less consideration in the development process. The Department of Conservation guidance note emphasises that the definition of historic heritage applies to a historic landscape, not just a site.

References remain in the oral tradition of whanau, hapū and iwi to landforms and features. A hill may be a reference point used in pepeha or whakatauki (proverbs) used to identify a marae, and may be visible from the marae. It can be difficult to refer to these landmarks in mihi (formal speeches) when they are being compromised by inappropriate development.

In this regard the NZCPS 2010 recognises, through Policy 2, the importance of protecting Māori cultural

Tauranga, Bay of Plenty

and heritage values through tools such as preparing landscape and cultural impact assessments. In addition, historic analysis, archaeological survey, alert layers and predictive methodologies can be used to better identify and protect areas and sites of special value to Māori.

Managing the relationship

An essential component of managing the relationship between Māori and coastal resources is effective communication and the NZCPS 2010 stresses the importance of this. It emphasises the relationship between developers (and consent authorities) and tangata whenua. Relationships should be initiated early on in any development project, appropriate expertise should be sought, and a genuine effort made to resolve any issues.

Policy 2 provides for the involvement of iwi authorities or hapū, on behalf of tangata whenua, in the preparation of regional policy statements and plans. This should be achieved by undertaking effective consultation with tangata whenua as early and as meaningfully as possible. It also recognises the need to incorporate mātauranga Māori (Māori customary knowledge, traditional knowledge or intergenerational knowledge) in planning documents, including in the consideration of resource consent applications and other similar processes. For example, Policy 21 directs that tangata whenua are to be engaged to identify areas of coastal waters where they have a particular interest in order to address cultural issues around sedimentation and pollution of coastal waters. In addition, Policy 23(3) directs that objectives, policies and rules in plans which provide for the discharge of treated human sewage into waters of the coastal environment must have been subject to early and meaningful consultation with tangata whenua.

The disclosure of sensitive information is recognised by the Department of Conservation guidance note as a key challenge for meaningful integration of iwi and hapū interests into the local government resource management decision-making process. There are situations when tangata whenua may wish the location of taonga such as a wāhi tapu to remain confidential and this can create challenges for RMA planning and decision-making processes.

Where possible, the affected tangata whenua should be provided with access to professional advice. There is clear direction in Policy 2(e)(ii) which encourages practical assistance to be given to iwi or hapū when they want to develop iwi resource management plans but are not well resourced to do so. Such assistance can help with clearly communicating the nature of the RMA, and the specifics of the development impacts, to tangata whenua in their own terms. In return, tangata whenua responses need to be understood and communicated back to the developer and consent authority. Expert advice is not easily available, but without experts such as pūkenga (a person skilled or versed in the customary and traditional knowledge, tikanga, arts, histories and genealogies of a particular iwi or hapū) tangata whenua may fail to communicate their genuine concerns. This can result in ongoing conflict when concerns could have been resolved early on.

Pā (centre) protected from pine plantation, north Taranaki coast

BEST PRACTICE DESIGN ELEMENTS

Development design which protects Māori values on the coast can include the following:

UNDERTAKE A CULTURAL IMPACT ASSESSMENT

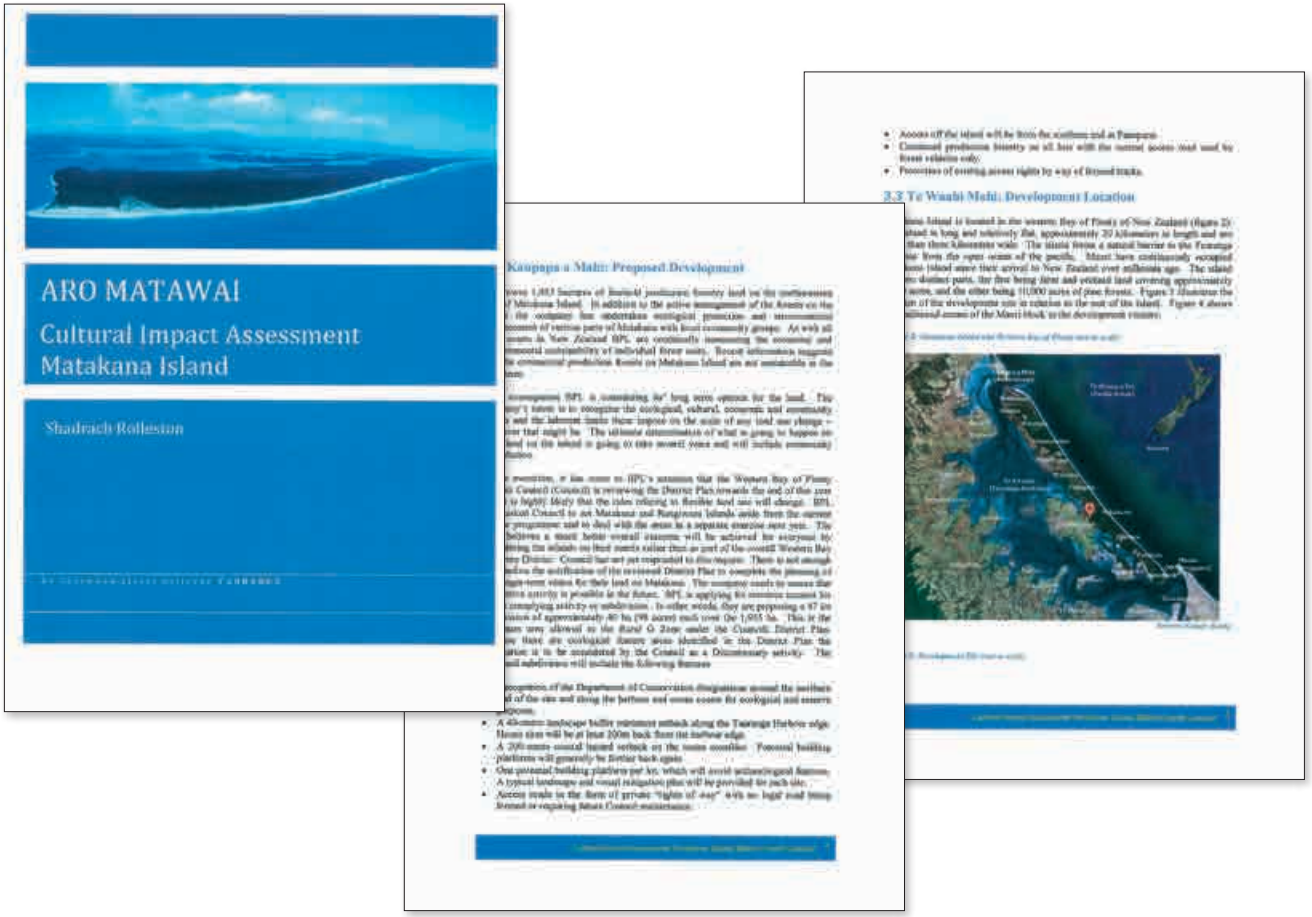
A key tool for protecting the relationship between tangata whenua and coastal resources is a cultural impact assessment which can identify how the development may impact on tangata whenua values.

Key points to consider:

- Undertake the assessment as early as possible, preferably prior to a resource consent application being lodged or a plan change being notified
- Incorporate oral history
- Incorporate archaeological evidence
- Identify flora and fauna of cultural significance
- Identify wāhi tapu
- Address access to cultural resources by tangata whenua
- Support communities' enjoyment of the coast with appropriate education

Example Cultural Impact Assessment for Matakana Island by Blakely Pacific

The purpose of this report is to assess the potential cultural impact of a development proposal on tangata whenua. The report identifies and describes Māori cultural values associated with the development site, identifies the impacts on tangata whenua, evaluates the effects of the proposed activity on cultural values and recommends measure to avoid, remedy or mitigate any adverse effects on tangata whenua.



BEST PRACTICE DESIGN ELEMENTS (continued)

RECOGNISE AND INCORPORATE IMPORTANT VALUES INTO DEVELOPMENT

Developments can incorporate tangata whenua values where appropriate.

Key points to consider:

- Consult with tangata whenua early on to identify any issues of significance to them, and where significant issues are identified, commission a cultural impact assessment
- Incorporate significant past and existing relationships between iwi and coastal resources within the design
- Acknowledge tangata whenua expertise and respect their intellectual property rights
- Describe the nature of the relationships that tangata whenua have with the sites, areas, features and other resources they treasure
- Develop protocols which, during construction, manage impacts on previously undiscovered cultural resources and record site information
- Where appropriate, incorporate cultural motifs, carvings and other tangata whenua design components into the development
- Incorporate native vegetation rather than exotic and encourage cultural harvesting of materials

Example Mountain Landing, Bay of Islands

This coastal development has made provision for a continued relationship between local hāpu and the land. Access is provided over the land to enable kaimoana gathering. Local hāpu members have also been employed to assist with the initial development of infrastructure and ongoing land restoration and development.

Mountain Landing, Bay of Islands

BEST PRACTICE PLANNING ELEMENTS

Regional and district policy and plans can include the following in order to recognise and protect Māori interests in the coast:

IDENTIFY AND PROTECT SIGNIFICANT ELEMENTS OF THE MĀORI RELATIONSHIP WITH THE COAST

Plans should identify and protect any significant and important elements of the relationship between Māori and coastal resources.

Key points to consider:

- Describe the nature of the relationships that tangata whenua have with the sites, areas, features and other resources they treasure
- Identify on planning maps sites of significance to Māori
- Where sites have not been fully identified, incorporate 'alert layers' indicating where there is a potential for impact on sites of significance to Māori to trigger certain actions
- Describe the types of activities and the effects that are likely to impact on the interests of tangata whenua
- Specify whether certain types of applications will be publicly notified or whether tangata whenua will be deemed to be an affected party requiring notification.
- Specify ways in which kaitiakitanga may be provided for
- Adopt methods for building the capacity of tangata whenua to engage and consult effectively

Example Waikato Regional Coastal Plan Chapter 2 Tangata Whenua Perspective

2.4 Tangata Whenua Relationship with the Coast.

Issue: In the past little recognition has been given to cultural, spiritual and traditional values of tangata whenua. This lack of recognition has meant the values tangata whenua hold in relation to the coast have been ignored.

Objective: Recognise and provide for the special relationship which tangata whenua have with the coastal environment.

Method 17.1.3 Identification of Areas/Characteristics of Special Value: Environment Waikato will work with tangata whenua over time to identify areas or characteristics of special value that require protection from use or development in the CMA.

Kennedy Bay, Thames-Coromandel District

BEST PRACTICE PLANNING ELEMENTS (continued)

INCLUDE PROVISIONS FOR ENSURING THE RESOURCE CONSENT PROCESS PROMOTES PROTECTION OF MĀORI VALUES

There are a number of opportunities, through the resource consent process, to protect Māori values.

Key points to consider:

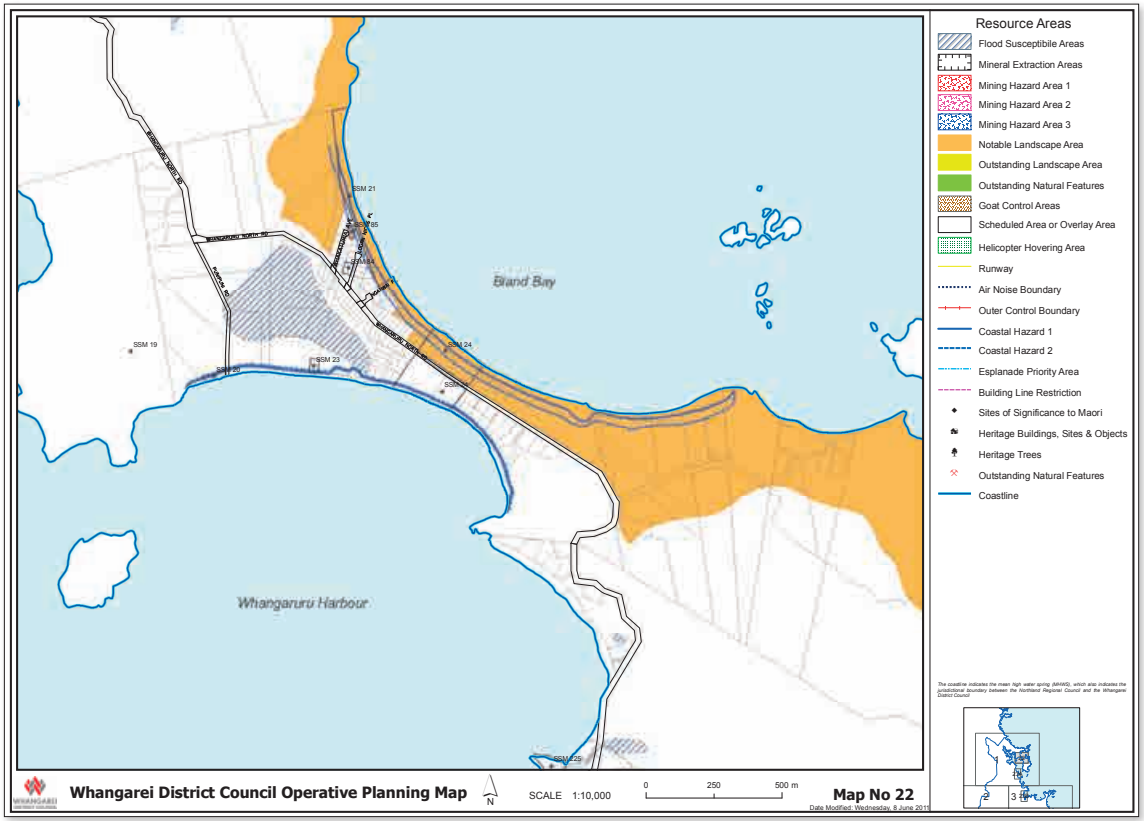
- Include rules for resource consenting which address specific concerns of local tangata whenua, such as access to sites of significance
- Require mitigation measures offered as part of resource consent applications to address tangata whenua interest or concerns
- Develop conditions during the assessment process to avoid, remedy or mitigate adverse effects on tangata whenua
- Provide for tangata whenua to be actively involved in the monitoring of consent conditions where they have an identified interest in the outcome the condition is seeking to achieve
- Reinforce the value of undertaking consultation as early as possible in the development of proposals and of undertaking meaningful and effective consultation

Example Whangarei District Plan

73.3.1 Allotment Area: Control is reserved over: … (iii) The location of proposed allotment boundaries, building areas and access ways or right-of-ways so as to avoid sites of historic and cultural heritage including Sites of Significance to Māori.

73.3.17 Rule Earthworks: Subdivision is a controlled activity if: … (c) No earthworks occur within a Site of Significance to Māori.

73.4 Principal Reasons for Rules/Explanations: Sites of Significance to Māori. This rule prevents the splitting up of mapped sites by subdivision. Sites must be entirely within one of the lots produced by the subdivision. This is to protect the cultural values and the integrity of Sites of Significance to Māori.



BEST PRACTICE PLANNING ELEMENTS (continued)

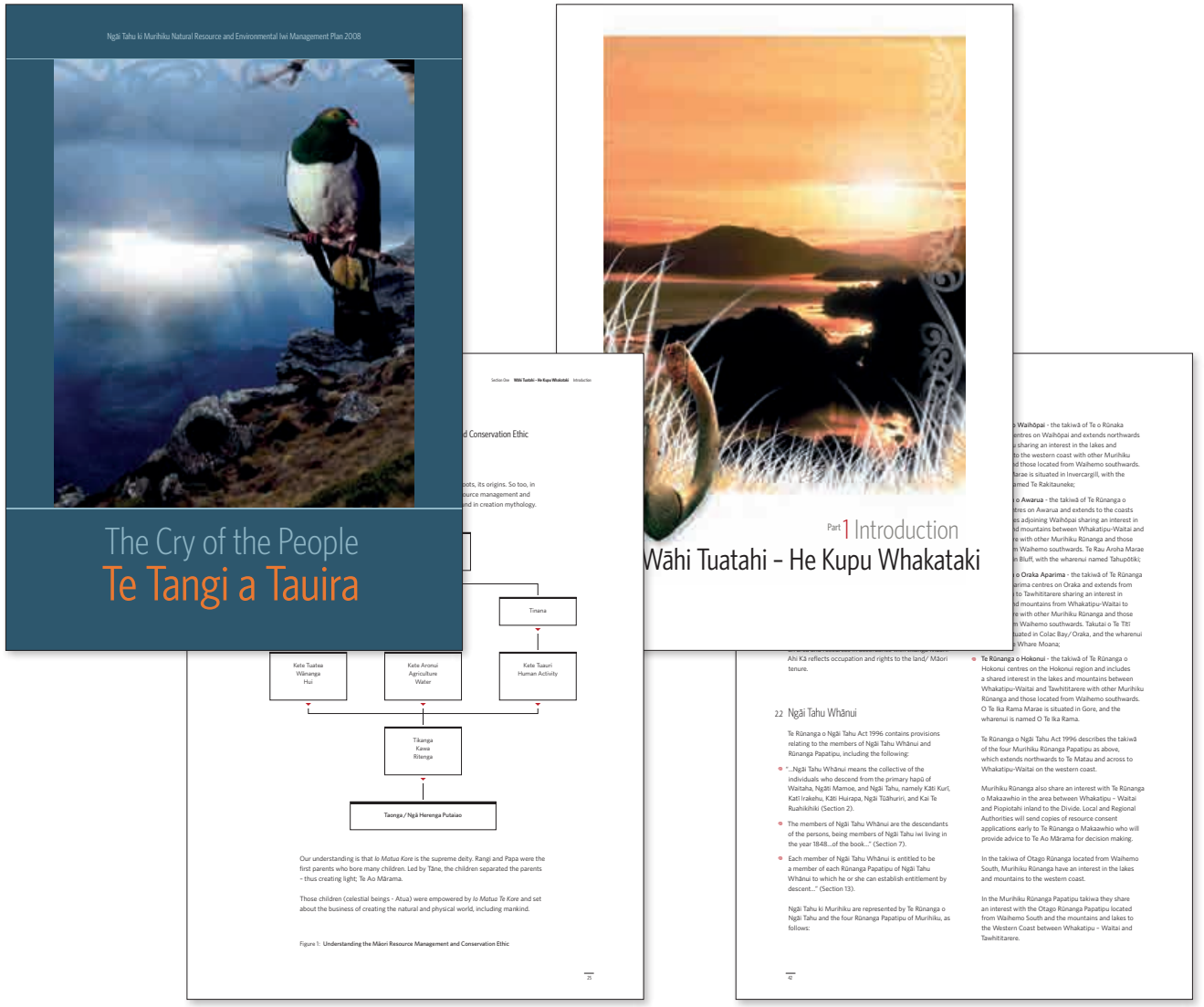
SUPPORT NON-STATUTORY PLANNING TOOLS WHICH PROMOTE PROTECTION OF MĀORI VALUES

There are a number of other tools which can be used to promote the protection of Māori interests in the coastal environment.

Key points to consider:

- Provide opportunities for the promotion of education on cultural heritage and the relationship between Māori and their taonga
- Provide financial and other incentives for Māori to protect important sites and values
- Adequately fund the maintenance and enhancement of council-owned coastal reserve land to ensure Māori values are protected
- Support the preparation of iwi planning documents by providing funding, resources, project management personnel, assistance with policy writing, or assistance with editing
- Involve tangata whenua in any key actions which affect their interests

Example The Ngāi Tahu ki Murihiku Natural Resource and Environmental Iwi Management Plan 2008



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FOOTNOTES

1 section 6(e)
2 section 6(g)
3 section 7(a)
4 section 8
5 Department of Conservation, 2013

Rangitoto Island, Hauraki Gulf

Ring-ditch pā, Ohope, Whakatane District

12 SAFEGUARDING HISTORIC HERITAGE

Wilson cement works c. 1900 at the limit of navigation on the Mahurangi River, near Warkworth

IN THIS SECTION...

INTRODUCTION

Coastal historic heritage is associated with human activities around the coast. It includes places of early Māori settlement and where early documented encounters between Māori and Pakeha occurred. Historic buildings and structures in the coastal environment comprise structures such as wharves, ferry buildings, memorials and lighthouses.

There are also numerous shipwrecks around the New Zealand coastline. Particular parts of New Zealand were "shipwreck coasts" while other areas were deliberately set aside as "graveyards" for the disposal of obsolete ships. There are many recorded and unrecorded archaeological sites in the coastal environment including pā, middens, whaling sites and coastal defence sites.

Kaipara North Head, Kaipara District

VISION

The elevation of historic heritage from section 7 to section 6 of the RMA in 2003 demonstrated the importance of this heritage being adequately protected as a matter of national importance. The NZCPS 2010 sets out a number of ways in which impacts on historic heritage within the coastal environment can be better managed. Part of Objective 6 recognises that heritage values along the coast are not fully known and are vulnerable to inappropriate development.

Objective 6

To enable people and communities to provide for their social, economic, and cultural wellbeing and their health and safety, through subdivision, use, and development, recognising that: …

- historic heritage in the coastal environment is extensive but not fully known, and vulnerable to loss or damage from inappropriate subdivision, use, and development.

The NZCPS 2010 seeks greater priority to be placed on safeguarding New Zealand's historic heritage. A collaborative effort between agencies, stakeholders and tangata whenua will be required to achieve this.

Gisborne, Poverty Bay

ISSUES

The coastal environment raises particular issues for historic heritage. Coastal processes may result in flooding, coastal erosion and sea-level rise. These have the potential to damage historic heritage near the coastal edge. In addition, works designed to prevent processes such as coastal erosion may harm historic heritage.

Most archaeological sites in New Zealand, including those on the coast, are easily damaged. Sources of damage include:

- Earthworks and the construction of buildings and structures in coastal areas containing archaeological sites
- Animal, foot and vehicle traffic which can destroy historic earthwork features and cause erosion
- Ploughing which can readily damage and destroy shallow heritage sites
- Fencing and tree planning which can damage the potential of heritage sites for research. The long-term effect of tree planting is often destructive, through disturbances from roots and falling trees as well as ground disturbances during timber harvesting
- Natural coastal processes, such as erosion , which can take away sites

Other coastal historic heritage can be degraded or destroyed through:

- Demolition or relocation of historic buildings and structures
- Use of historic buildings and structures for purposes which are unsympathetic to their values
- Location of inappropriate uses and structures in historic precincts, or in proximity to individual historic sites
- Construction of new buildings which are out of scale or sympathy with historic sites

The International Council on Monuments and Sites Charter (*ICOMOS New Zealand Charter 2010*) provides a good guide to protecting the integrity of historic buildings and sites. The *community guide to landscape protection under the Resource Management Act 1991* provides more information about the protection of historic landscapes. The Historic Places Trust's discussion paper on the *Sustainable management of historic heritage* is also of value.

Tauranga, Bay of Plenty

POLICY

There are two main pieces of legislation which protect historic heritage: the RMA (and subsequently the NZPCS 2010) and the Historic Places Act 1993. The RMA regulates impacts on heritage (among other things) caused by resource use and development. The Historic Places Act sets up a separate process to manage heritage sites, controls modifications to archaeological sites, and creates an advocate for heritage values in the Historic Places Trust. The Heritage New Zealand Pouhere Taonga Bill proposes to reform the governance structure and the archaeological authority (consent) processes established under the 1993 Act. It also introduces emergency authorities to apply in the event of serious natural disasters.

The Bill proposes relatively little change to the archaeological provisions but does clarify the application of these to buildings and in particular, when enacted, provides that an authority under the archaeological provisions is only needed when a building is to be demolished in its entirety.

Defining historic heritage

Historic heritage is defined in the RMA. This definition is encompassing and includes "those natural and physical resources that contribute to an understanding and appreciation of New Zealand history and culture". It also incorporates "surroundings" that are significant for retaining and interpreting the heritage significance of the heritage item. This definition has been tested through the Environment Court a number of times. The Court has found that it may include the land on which a heritage building is sited or a precinct which includes buildings, relics, trees, places and their setting.[1] This helps to overcome the problem of development adjacent to a protected structure cancelling out or detracting from the protection objective.

Fyffe House, Kaikoura

RMA, Section 2, Definition of historic heritage

Historic heritage—

(a) means those natural and physical resources that contribute to an understanding and appreciation of New Zealand's history and cultures, deriving from any of the following qualities:

  (i) archaeological:

  (ii) architectural:

  (iii) cultural:

  (iv) historic:

  (v) scientific:

  (vi) technological; and

(b) includes—

  (i) historic sites, structures, places, and areas; and

  (ii) archaeological sites; and

  (iii) sites of significance to Māori, including wāhi tapu; and

  (iv) surroundings associated with the natural and physical resources

The definition of historic heritage does not refer to landscape specifically, although it does include some elements of landscape (sites, places and areas). In addition, heritage values are required to form part of the assessment of an outstanding natural landscape within the coastal environment under NZCPS 2010 Policy 15.

Archaeological sites form an important subset of the wider category of heritage sites and are defined in the Historic Places Act 1993 as any place associated with pre-1900 human activity, including shipwrecks, where there is evidence relating to the history of New Zealand that can be investigated using archaeological methods. They include both Māori and non-Māori sites.

Historic Places Act 1993, Section 2, Definition of archaeological site

Archaeological site means any place in New Zealand that—

(a) either—

  (i) was associated with human activity that occurred before 1900; or

  (ii) is the site of the wreck of any vessel where that wreck occurred before 1900; and

(b) is or may be able through investigation by archaeological methods to provide evidence relating to the history of New Zealand

Protection of historic heritage

Section 6(f) of the RMA requires the protection of historic heritage from inappropriate subdivision, use and development. However, this does not mandate protection of historic heritage at any cost. Rather, it is to be weighed as a nationally important factor in deciding whether, in the particular case, the factors in favour of proposed interference with an item of historic

heritage outweigh the nationally important factor of preserving its heritage values from complete loss.

A primary means for giving effect to this recognition is to list items of historic heritage in plans. Some plans set objectives, policies and rules that relate to wider classes of sites that are not scheduled but generally these require the consideration of their heritage values rather than proscribe protection.

The Historic Places Act prohibits any person destroying, damaging, or modifying, the whole or any part of any archaeological site, without an authority. An application for such an authority may apply to a specific archaeological site or a specified area of land. The Historic Places Trust has discretion to grant or decline an authority, but must make its decision within three months of an application being lodged. Essentially the legislation requires an authority to be sought for any modification to an archaeological site.

The Māori Heritage Council, established under the Historic Places Act, considers recommendations in relation to archaeological sites. The Heritage New Zealand Pouhere Taonga Bill is codifying current practice by requiring that all applications for archaeological authorities that affect sites of interest to Māori are referred to the Māori Heritage Council.

Rewa hulk, Moturekareka Island, Hauraki Gulf

Much archaeological evidence can only be interpreted by a trained professional and this is why it is important for such a professional to be engaged when archaeological sites are likely to be encountered during a development. Where completely buried, archaeological sites may not be visible until the ground is disturbed. Sites which are newly discovered during the development process are protected from further disturbance until an authority is obtained.

The district plan has an important role to play in managing the surroundings associated with archaeological sites. It can provide an additional layer of protection and ensure applicants and the public are informed about the archaeological authority process. All archaeological sites should be considered for inclusion in district plan heritage schedules, due to the section 2 definition of historic heritage which includes archaeological sites.

The NZCPS 2010 sets out a number of ways in which historic heritage in the coastal environment is to be protected. Policy 17 recognises the importance of identifying and recording historic heritage in order to safeguard it from the impacts of development. It also encourages councils to utilise a range of tools and mechanisms to protect historic heritage including collaborative management planning documents, relief grants and rates relief. In addition, Policy 20(e) highlights the potential for damage to historic heritage sites and values from inappropriate vehicle access and the need to manage this effectively.

Policy 17: Historic heritage identification and protection

Protect historic heritage in the coastal environment from inappropriate subdivision, use, and development by:

a. identification, assessment and recording of historic heritage, including archaeological sites;

b. providing for the integrated management of such sites in collaboration with relevant councils, heritage agencies, iwi authorities and kaitiaki;

c. initiating assessment and management of historic heritage in the context of historic landscapes;

d. recognising that heritage to be protected may need conservation;

e. facilitating and integrating management of historic heritage that spans the line of mean high water springs;

f. including policies, rules and other methods relating to (a) to (e) above in regional policy statements, and plans;

g. imposing or reviewing conditions on resource consents and designations, including for the continuation of activities;

h. requiring, where practicable, conservation conditions; and

i. considering provision for methods that would enhance owners' opportunities for conservation of listed heritage structures, such as relief grants or rates relief.

POLICY (continued)

Integration into planning documents

Historic heritage is a nationally important resource that requires integrated management at the regional and district level. Regional policy statements play an important role in providing the framework for such integrated management. They could be expected to include a historic heritage chapter which contains:

- An overview of heritage agency roles and responsibilities
- A discussion of significant historic heritage issues for the region
- Objectives and policies for the management of effects that may impact on historic heritage
- A range of methods for protecting historic heritage
- Principal reasons for adopting objectives, policies and methods
- Key definitions associated with historic heritage

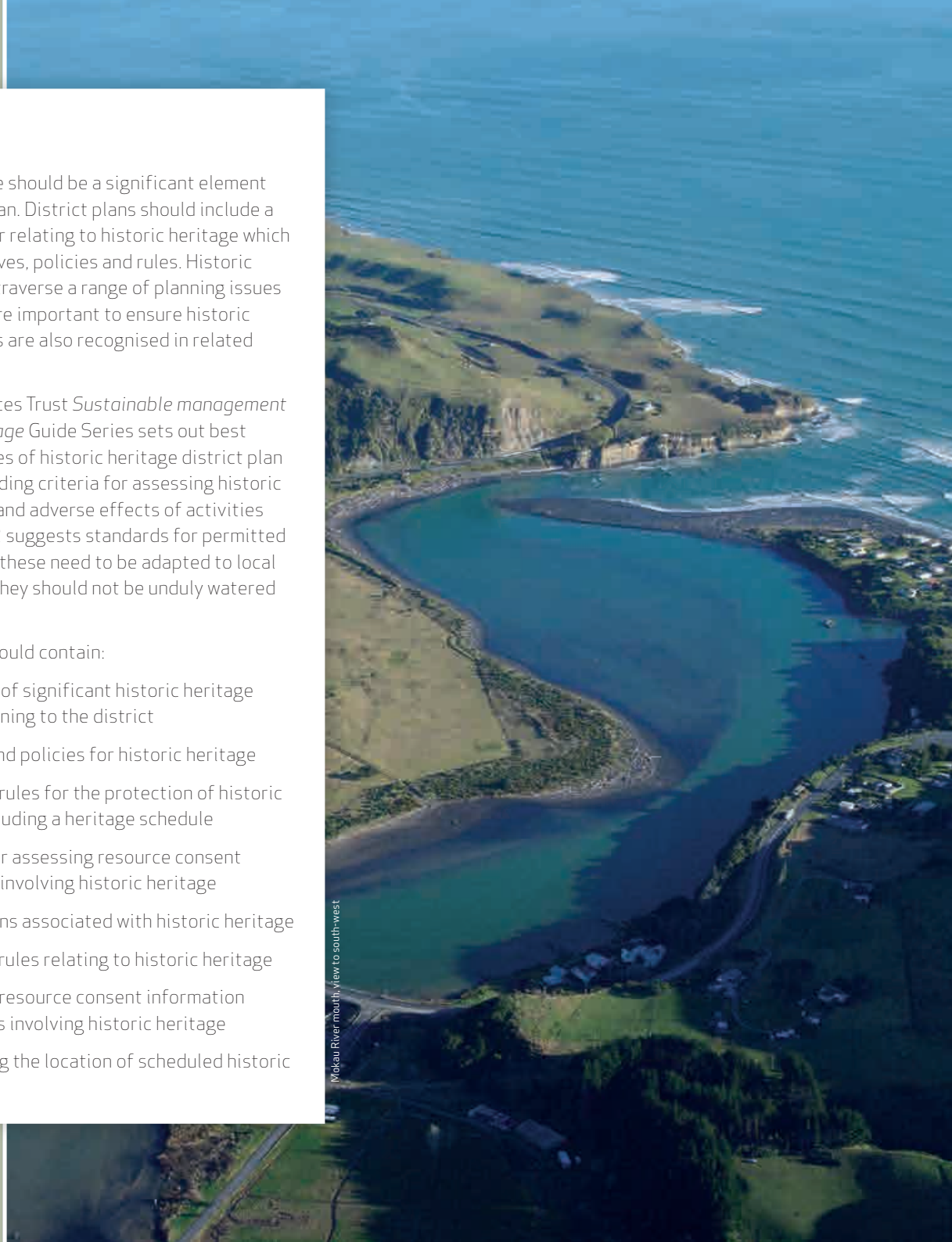
Regional plans may set aside a separate chapter for historic heritage including objectives, policies, rules and reasons. Alternatively, historic heritage matters may be incorporated into other sections, addressing activities such as earthworks, vegetation clearance, water and reclamation where relevant. It is important that regional plans avoid administrative duplication with district plan provisions and are prepared in conjunction with territorial authorities. When preparing or changing a regional plan, a regional council shall have regard to any relevant entry in the Historic Places Register[2]. Regional coastal plans should schedule heritage sites that are located within the coastal marine area.

Historic heritage should be a significant element in any district plan. District plans should include a separate chapter relating to historic heritage which contains objectives, policies and rules. Historic heritage issues traverse a range of planning issues and it is therefore important to ensure historic heritage matters are also recognised in related sections.

The Historic Places Trust *Sustainable management of historic heritage* Guide Series sets out best practice examples of historic heritage district plan provisions, including criteria for assessing historic heritage values and adverse effects of activities on them. Guide 2 suggests standards for permitted activities. While these need to be adapted to local circumstances, they should not be unduly watered down.

District plans should contain:

- A discussion of significant historic heritage issues pertaining to the district
- Objectives and policies for historic heritage
- Appropriate rules for the protection of historic heritage, including a heritage schedule
- Standards for assessing resource consent applications involving historic heritage
- Key definitions associated with historic heritage
- Notification rules relating to historic heritage
- Appropriate resource consent information requirements involving historic heritage
- Maps showing the location of scheduled historic heritage



Mokau River mouth, view to south-west

BEST PRACTICE DESIGN ELEMENTS

The following actions can be taken by developers to ensure that their developments are designed to avoid adverse impacts on coastal historic heritage:

IDENTIFY RECORDED HISTORIC SITES

Identify any recorded historic sites on the property through checking the district plan, council records, the New Zealand Archaeological Association site recording scheme and Historic Places Trust records.

Key points to consider:

- The absence of records is not evidence of the absence of sites
- The Historic Places Trust can usually advise if there is a likelihood of unrecorded sites on a property
- Where archaeological sites are recorded or identified as likely, fieldwork will often be necessary to confirm the survival, extent and significance of the sites and may often discover unrecorded sites near known ones

Undesirable example Kawau Island, Hauraki Gulf

A bach has encroached into a heritage site.

Desirable example Maranui Road, Papamoa

The beachfront and sand dunes are a registered heritage site where the Tauranga City Council Heritage Rules apply

BEST PRACTICE DESIGN ELEMENTS (continued)

CONSULT EARLY WITH TANGATA WHENUA

Consult with tangata whenua early on to identify sites of significance to them. Where any sites of significance are identified, involve a cultural heritage professional early on in the design process.

Key points to consider:

- Local councils often have iwi liaison officers who can indicate where advice on tangata whenua values should be sought
- Iwi will often wish to liaise with any archaeological assessors engaged by the developer
- A cultural heritage expert will assess the heritage values of the site and advise on how to design the development to minimise any negative effects on those values
- Cultural heritage experts can also offer guidance on how best to embody and enhance the cultural heritage features in the design

Undesirable example Taharoa, King Country

Sand mining in this area has resulted in the destruction of many sites of cultural importance

Desirable example Harbour Link, Tauranga

Tangata whenua were consulted with early on in the Harbour Link planning process and cultural experts engaged

BEST PRACTICE DESIGN ELEMENTS (continued)

PROTECT HERITAGE SITES OR VALUES

Where heritage sites or values require permanent protection, place a restrictive covenant over the land title. Ensure that, where there is accidental or planned impact on heritage sites, full records are maintained. Ensure that buildings, structures, earthworks or plantings do not damage heritage sites. Where there is the potential to uncover new archaeological sites or burials, manage the construction process to reduce this risk.

Key points to consider:

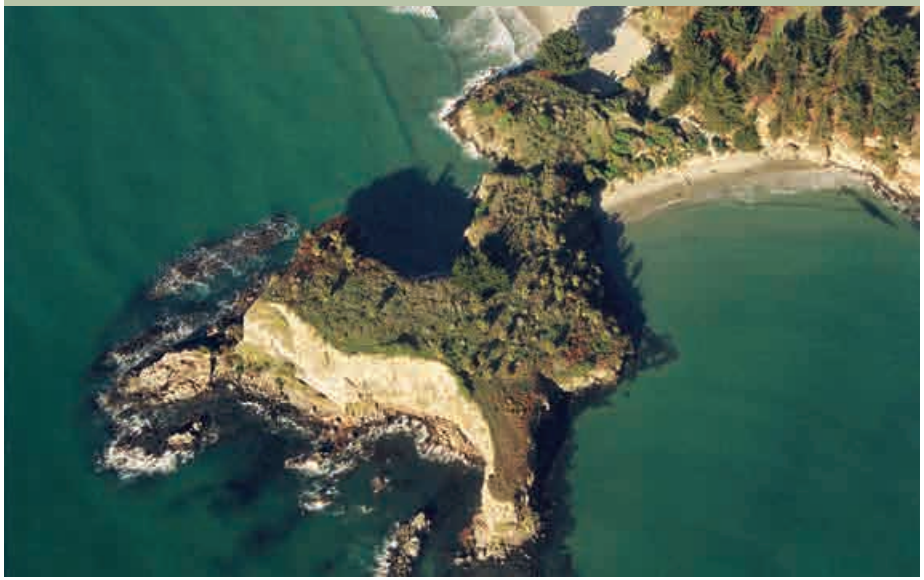
- Monitor earthworks
- Develop a management plan to deal with such sites if they appear
- Seek sympathetic new uses for heritage buildings rather than demolition or relocation, which are always poorer outcomes
- Where historic buildings or structures are modified, ensure that new parts of the building blend in well with the old
- Use appropriate materials and colours in heritage building modifications
- Preserve exteriors where possible and facilitate recording of interiors before modification

Undesirable example Eastern Kaipara

This pā site has been heavily grazed and a fence has been constructed through the middle of it

Desirable example Mapoutahi Pā, Otago Peninsula

This pā site has been retired from grazing and pasture is reverting to indigenous vegetation



BEST PRACTICE PLANNING ELEMENTS

Regional and district plans can include the following in order to preserve coastal historic heritage:

SCHEDULE HISTORIC SITES IN PLANNING MAPS

Include a schedule of historic sites in the appendices of planning maps.

Key points to consider:

- Identify the location of each site on the planning maps
- Provide for the integrated management of sites in collaboration with key stakeholders and tangata whenua
- Develop appropriate objectives, policies and rules to support the management of historic sites as directed by the Historic Places Trust *Sustainable management of historic heritage* Guide Series
- Provide methods to support owners conserving listed heritage structures, such as relief grants or rates relief
- List historic items located in the coastal marine area in the regional coastal plan heritage schedule
- Include in the schedule basic locational information, Historic Places Trust registration information, listed interiors and important settings or surroundings.

Example Bay of Plenty Regional Policy Statement

Importantly, the regional policy statement includes guidance in the form of criteria for the identification of historic heritage and provisions that ensure that identified heritage is listed in district plans for protection.

Appendix F – Criteria for assessing matters of national importance in the Bay of Plenty region

Generic Values (criteria to be applied in all assessments of historic heritage:

Period 5.1 The development sequence of a place or area, the likely age, duration of use or chronology of a place or area.

Rarity or Special Features 5.2 The unique, uncommon or rare features of a place or area. This may be as a result of the cultural context of the place or area. This may include the technical interest of all or any part of the place or area. The previous existence and nature of lost or obliterated components or aspects. The function of the place and its parts and the relationship of the place and its parts with its setting.

Integrity 5.3 The condition, quality and state of original features of a place or area. Comparison with other examples of its class. The quality of any restoration, addition or modification of the place or area.

Representativeness 5.4 The characteristics and relationship of the place or area to other places or areas in its class, for example in respect of design, type, features, technology, use, activity, location or origin.

Context or Group Value 5.5 Association with other places, areas or elements of its context. Association with and illustration of broad patterns of history. Places or areas in which evidence of the association or event survives in situ, or in which the settings are substantially intact.

Diversity (Form and Features) 5.6 The characteristics, diversity and pattern of a place or area. The cultural influences which have affected the form and components of the place or area. Form, scale, colour, texture and materials. The historical content of the place or area with particular reference to the ways in which it has been influenced by historical forces or has itself influenced the course of history.

Fragility or Vulnerability 5.7 The components, form and structure of the place or area and the effect of this on its survival. Its vulnerability to deterioration or destruction. The degree to which it is threatened and its context in terms of protection and services.

In addition to the above generic values, any assessment of historic heritage qualities must consider other qualities including archaeological, architectural, cultural, historic, scientific and technological.

Mauao, Mt Maunganui, Tauranga

BEST PRACTICE PLANNING ELEMENTS (continued)

PROTECT BOTH IDENTIFIED AND UNIDENTIFIED SITES

Where heritage sites have not been fully identified, incorporate "alert layers" into planning maps which indicate where there is potential for impact on historic heritage. The heritage schedule in plans should not be for "information purposes only" and should be accompanied by protective provisions. Include objectives, policies and rules that ensure the protection of both identified and unidentified historic sites.

Key points to consider:

- Use alert layers to trigger a requirement for a resource consent applicant to undertake an investigation to identify whether any historic heritage is located on the site. To provide more flexibility, in order to allow for the addition of newly discovered sites, some councils have used an off-plan register to provide alerts, but this register must be referenced in the plan
- Revise plan provisions in light of the elevation of historic heritage to section 6 of the RMA and the requirements of the NZCPS 2010 policies
- Restrict activities which may impact on heritage sites
- Require historic heritage to be covered in the Assessment of Environmental Effects accompanying resource consent applications
- Require the assessment and management of historic heritage to be undertaken in the context of historic landscapes
- Facilitate and integrate management of historic heritage that spans the line of mean high water springs

Example Auckland Regional Policy Statement Chapter 6 Heritage

Objective 6.3.9 To manage heritage resources in an integrated way to ensure their contribution to the variety of heritage values is protected and enhanced.

Policies 6.4.1 Heritage preservation and protection. Policy 3. The subdivision of land, and use and development of natural and physical resources shall be controlled in such a manner that:

(i) the values of heritage resources of international, national or regional significance are preserved or protected from significant adverse effects.

(ii) where preservation or protection and avoidance of significant adverse effects on the values of such significant heritage resources is not practicably achievable, such significant adverse effects shall be remedied, or mitigated.

Shipwrecks, Rangitoto Island, Hauraki Gulf

BEST PRACTICE PLANNING ELEMENTS (continued)

PROVIDE SPECIAL HERITAGE ZONES

Identify and provide special heritage zones which protect the character of areas containing historic buildings or places.

Key points to consider:

- Identify heritage zones which have a particular concentration of heritage elements and provide policies and rules relating to these zones
- Use policies and rules to regulate the design of new structures to ensure incompatible designs do not detract from the value of nearby heritage
- Use rules for permitted activities to specify such matters as height, site coverage, design, finish and colour
- Use controlled activity status to enable discretion to approve or disapprove building design

Example Whanganui District Plan

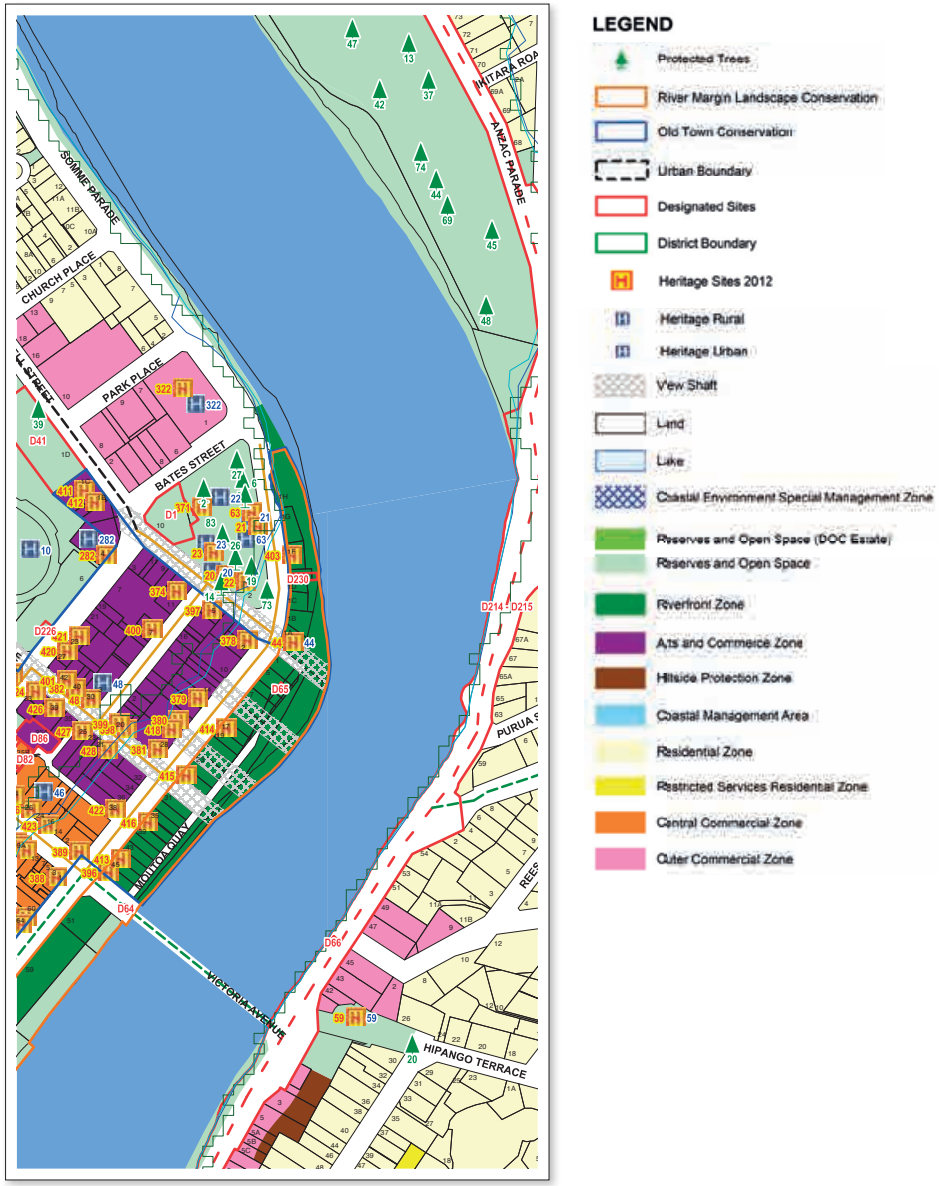
Objective O51 recognition and conservation of the special historic heritage significant of the Old Town.

Policy P172 Recognise the Old Town as a conservation area and ensure the protection of the great historic, cultural, architectural and townscape significance of the Old Town area for future use and development by: (b) Identifying contributory buildings that support the heritage context of the primary buildings and adopting appropriate and practicable guidelines to ensure that works undertaken on these buildings do not have an adverse effect on the primary heritage item.

Method M332 Identify on District Planning maps the Old Town area.

Method M333 By December 2014 develop urban design guidelines for the Old Town area to assist developers in designing new buildings or in making alterations and additions to existing buildings.

(*Note these are proposed changes as part of the Proposed Plan Change 29 Built Heritage - at the time of writing)



BEST PRACTICE PLANNING ELEMENTS (continued)

OFFER REGULATORY AND FINANCIAL SUPPORT FOR OWNERS OF LISTED PROPERTIES

Regional and district plans can indicate that regulatory and financial support may be provided to the owners of properties which are listed for conservation.

Example Auckland Council

Most legacy councils of Auckland Council allocated funds to assist private owners with the cost of protecting, conserving and restoring heritage items identified in their district plans and the Auckland Regional Plan: Coastal. Examples of projects that may receive funding include:[3]

- Earthquake strengthening of buildings and structures
- Repair and restoration of built heritage fabric
- Maintenance of scheduled trees and fencing to prevent damage to archaeological and Māori heritage sites
- Professional services, such as the preparation of archaeological reports, conservation plans and historical research

Key points to consider:

- Provide dispensations or flexibility for the need to comply with other district plan standards in order to achieve historic heritage objectives
- Provide rates relief for historic sites and buildings

Shed 10, Queens Wharf, Auckland

REFERENCES AND FURTHER READING

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FOOTNOTES

1 *Oriental Parade (Clyde Quay) Planning Society v Wellington City Council* EnvC Wellington W063/052 August 2005

2 section 66(2)(c)(iia)

3 http://www.arc.govt.nz/albany/fms/main/Documents/Plans/Reports/Full%20report%202009/Chapter%205_2%20-%20Historic%20heritage%20part%203.pdf

Kawhia harbour and Kawhia township. Maketu Marae and resting place of Tainui waka, bottom centre

13 URBAN WATERFRONT DEVELOPMENT

Auckland City

IN THIS SECTION...

INTRODUCTION

The extent of the coastal environment includes many city centre waterfronts.[1] There are eleven cities in New Zealand which have central business districts directly connected with the coast. Their combined number of residents is nearly 2.4 million or 53 per cent of the country's total population.[2] Nine of these cities retain connections to traditional port activities (Auckland, Tauranga, Napier, Wellington, Nelson, Dunedin, Invercargill, New Plymouth and Whangarei) and two (Lower Hutt and Porirua) emerged as satellite cities with an added advantage of being close to the coast.

Like rural and smaller coastal settlements, city centre waterfronts are also at risk of coastal hazards and the degradation of coastal and terrestrial ecosystems. Inappropriately designed and built facilities and infrastructure on the waterfront can adversely modify the natural character, landscape, visual or amenity values and cultural and historic heritage of the coast.

New Zealand cities are following many international examples of change in urban waterfronts. As port facilities modernise, expand and move further away from the city centre or reduce their footprint, many urban waterfronts have become multifunctional mixed-use developments. These provide opportunities for new residential areas and economic activities, conservation of history, restoration of natural character, and increased opportunities for recreation and public access.

Silo Marina, Auckland

VISION

The vision for urban waterfront development provided by the NZCPS 2010 seeks to ensure that these areas are developed and managed in an integrated and sustainable manner. Several other objectives within the NZCPS 2010 are also relevant in relation to management of water quality, provision of public access, protection of natural and cultural values and management of risks from coastal hazards.

Objective 6

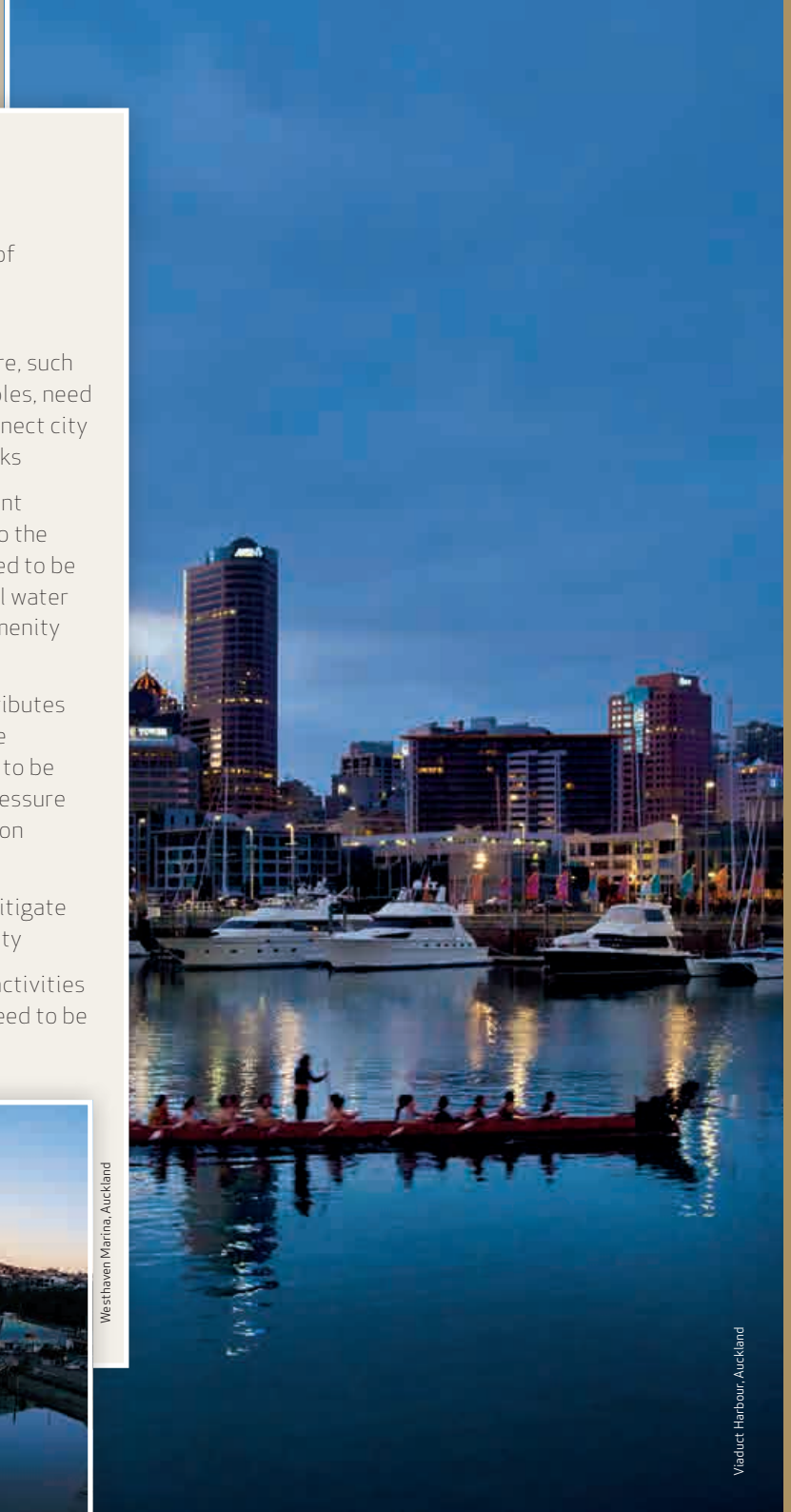
To enable people and communities to provide for their social, economic, and cultural wellbeing and their health and safety, through subdivision, use, and development, recognising that:

- the protection of the values of the coastal environment does not preclude use and development in appropriate places and forms, and within appropriate limits;
- some uses and developments which depend upon the use of natural and physical resources in the coastal environment are important to the social, economic and cultural wellbeing of people and communities;
- functionally some uses and developments can only be located on the coast or in the coastal marine area; …

The direction provided by the NZCPS 2010 is particularly useful when addressing a number of conflicting challenges facing urban waterfront development in New Zealand:

- Established local and national infrastructure, such as ports, railways, roads and submarine cables, need to operate without interruption to help connect city centres with local and international networks
- The natural and physical resources important to tangata whenua, including kaitiaki, and to the economic and social wellbeing of cities, need to be preserved and maintained including coastal water quality, natural character, landscape and amenity values
- The recreational and remaining natural attributes of the urban coastline, and attraction of the waterfront as a place to live and visit, need to be preserved, while controlling the growing pressure placed by the increasing number of people on coastal space and other resources
- Inland activities need to be controlled to mitigate their adverse impact on coastal water quality
- The adverse effects of natural hazards on activities and properties along the urban coastline need to be managed

Westhaven Marina, Auckland



Viaduct Harbour, Auckland

ISSUES

Waterfront cities traditionally operated as seaport towns, which traded resources harvested from the coast, and processed and stored goods in adjacent, purpose-built industrial facilities. More recently, councils and developers have been engaging in the revitalisation of derelict industrial land and, in some cases disused portions of the port, to introduce mixed-use development that will help drive economic growth and reinvent their cities. These activities can significantly alter the nature and functioning of the coastal environment as did the former industrial activities.

Research shows that the worldwide trend of regenerating waterfronts can increasingly damage the coastal environment.[3] This is demonstrated by the decline in water quality and fish populations in many harbours, and the progressive alteration of key coastal habitats.

The issues often associated with urban waterfront development include:

- Potential loss of natural and historic character and features due to inappropriate development
- Loss or damage to property due to coastal hazards such as sea level rise, inundation, subsidence, slippage and erosion (with or without a seawall), storm surge, and tsunami
- Pollution from contamination of historic industrial land, dredging and point and diffuse sources of stormwater and wastewater discharges
- Socio-economic conflict in the allocation of public and commercial access to the water
- Loss or decline of aquatic habitats and overall coastal ecosystems due to poor and declining water quality created by pollution and sedimentation
- Decrease in the quality of urban coastal edges due to inappropriate development
- Inadequate provision of public access
- Demand for reclamation and structures extending into the coastal marine area
- Lack of integration between planning for management of the land and the marine area
- Achieving an appropriate mix of activities to make redevelopment economically viable while ensuring vitality of public spaces
- The appropriate provision of different types of public open space adjacent to the water
- The need to upgrade or improve expensive infrastructure in order to enable new development, such as stormwater and services
- Addressing iwi values and interests

On the positive side, regeneration projects can aid in significantly cleaning up former industrial damage, resulting in pollution reduction and ecosystem restoration. Many waterfront agencies seek environmental accreditation to assist in achieving a sustainable waterfront and reducing negative impacts on the wider coastal environment.

Ports of Auckland, Waitematā Harbour

POLICY

The NZCPS 2010 does not distinguish between policies which apply to rural or urban settlements. Due to this, many of the policies apply to new and existing urban waterfront developments.

The NZCPS 2010 directs local authorities to adopt both a precautionary and integrated approach to managing the coastal environment. The integrated approach requires coordinated management of the coastal environment across different administrative boundaries, applicable laws and activities (Policies 4, 5 and 6). This is particularly relevant for waterfronts because they are places where:

- The conflict between conservation and development is more intense
- Equally important public, commercial and infrastructure provision compete for limited space
- Development makes physical changes to the natural environment
- The cumulative effects of urban activities affect water quality and marine ecosystems

Policy 7 requires local authorities to be strategic whilst adopting a precautionary and integrated approach. It is important that a waterfront development plan shows where, how and when future development will take place. It will also need to indicate what activities will be appropriate or not, and how the development can manage the risks of adverse cumulative effects, coastal hazards and reaching the capacity threshold of the coastal environment.

Protecting urban waterfront development

The NZCPS 2010 focuses on hazard adaptation, avoidance and risk mitigation over a 100-year timeframe, with preference for the use of soft and natural protection (Policies 24 to 27 which are discussed further in Chapter 9). Hard protection structures are only to be used to protect infrastructure of regional or national importance. City centre waterfronts, being regionally important, typically use hard protection structures due to the pressure on available space, the value of infrastructure located directly adjacent to the coast, and the already modified nature of the environment.

Maintaining water quality

The NZCPS 2010 seeks to maintain high water quality, even in an urban coastal environment, to the point of restricting existing uses to give priority to improving water quality (Policies 8 and 21). This is to support aquaculture (where approved and operational), land-based but water-dependent facilities (such as fishing platforms), marine ecosystems, natural habitats and water-based recreational activities (such as swimming). Policy 22 requires that development should not create significant sedimentation in the coastal area and there should be controls on land use activities to help reduce sediment loadings in runoff and stormwater systems. Policy 23 requires operators of port and marine facilities to take all practicable steps to safely contain and dispose of sewage, wastes and other contaminants from vessels. Water quality is discussed further in Chapter 7.

Fostering economic activities

While focused on maintaining the natural state of the environment, the NZCPS 2010 seeks to ensure that urban waterfront development does not adversely affect the ability of the country's national and international ports to operate and connect efficiently and safely with other ports and land-based transport modes, and to develop in a strategic manner (Policy 9). Policy 10 generally discourages reclamation, unless this results in regional benefits. Where this is considered suitable, the design and form of the reclamation should have regard to the effects of climate change and sea-level rise and avoid the use of contaminated materials. De-reclamation of redundant land is encouraged only where it would help restore the natural character and provide for more public space. This is discussed further in Chapter 5.

Protecting the natural environment and character

The provision for the protection of the natural and historic environment, character, features and landscapes of the coastal environment is a key direction in the NZCPS 20101 and is of particular relevance to urban waterfronts. There

Tauranga, Bay of Plenty

POLICY (continued)

is a requirement for activities to avoid significant adverse effects and to avoid, remedy or mitigate adverse effects on indigenous biodiversity (Policy 11) and a restriction on discharges to the coastal environment of harmful aquatic organisms created by urban development (Policy 12). These matters are discussed in Chapter 8.

There are also a number of policy provisions which promote the protection of the natural and cultural environment. These protect remaining natural character, landscape values and historic heritage. They also promote the restoration of natural character, indigenous habitats and ecosystems and sensitive redevelopment of waterfronts can help achieve this. These policies are discussed further in Chapters 5, 6 and 12.

Providing public access

The NZCPS 2010 seeks to ensure that the public will have sufficient access to the coast and this is particularly relevant to urban waterfronts where there is a strong expectation of public access. Policy 18 directs councils to provide public open spaces for both active and passive recreation, ensuring that their location and treatment contribute to the natural character, features, landscapes and amenity values of the coast. It also requires consideration of future requirements, taking into account the likely impacts of natural coastal processes and climate change. Policy 19 seeks to maintain and enhance public walking access to and along the coast that is practical, free of charge, and safe, with restriction where necessary to protect certain species, historic heritage, public safety and temporary activities. The relevance of these policies is discussed further in Chapter 10.

APPROACHES TO MANAGEMENT

While the management approach for rural and provincial urban waterfront environments tends to focus on natural preservation and soft protection, a different approach has been applied to city centre waterfronts. Here the focus has been more on character preservation, sustainable development and hard protection. This has allowed for continued redevelopment, to maximise the use of finite waterfront resources within the urban area, and to provide for regionally and nationally significant activities. There are a number of different management approaches that can be adopted in addressing urban waterfront development, with some of the key ones outlined below. A number of these are also discussed in Chapter 15 with some examples and case studies provided.

Integrated coastal management

By taking into account the goals, needs and characteristics of the waterfront itself, the wider coastal environment, and the city as a whole, integrated management can lead to optimum decisions on the uses suitable for the waterfront and the connections between them. This approach supports sustainable development where waterfront regeneration can generally result in social, economic and environmental benefits. This, however, requires an effective regulatory framework, political will and cross-sector cooperation, to facilitate long term planning.[4]

The key to successful integrated management is effective waterfront organisation, in spatial and administrative terms. Spatial organisation involves clustering uses according to their relevance to sustainable development and location. Although waterfronts promote mixed use and diversity, there should be a distinct definition of the various activities involved.

Administrative organisation may involve the creation of an agency under the council to ensure that development is administered in a sustainable and strategic manner, and is integrated into the management of the wider coastal environment. Such an agency should consider the waterfront as a top rank spatial system conforming to the wider ecosystem. The agency can provide a lead for integrated management of the coastal area. This will allow coastal area management and waterfront planning to usefully interact in order to generate long term positive feedback in determining the role of the waterfront, reaching agreement on overall management goals, and resolving the triangular city-port-industry issue of locational, organisational, environmental and aesthetic incompatibilities.[5]

Smart growth

Smart growth is a strategic public sector solution to sprawl, which aims to intensify areas where investment in services and infrastructure can be maximised, and which are outside of environmentally protected areas such as the coast. Waterfronts have been the target for intensification in recent years due to their proximity to the city centre, the considerable benefits obtainable from regeneration, and the high value of the land. Smart growth approaches are therefore applicable to waterfront redevelopment.

Smart planning ensures both non-water and water-dependent uses are cohesively in balance so that the waterfront can better adapt to fluctuations in the economy, weather or seasonal changes.[6] There are ten identified elements of a smart coastal and waterfront development which are[7]:

- Mixed land uses
- Compact design
- A range of housing choices
- Walkable communities
- Distinctive, attractive communities
- Open space and critical environmental areas
- Development directed toward existing communities
- A variety of transportation options
- Predictable, fair and cost-effective decisions on development
- Community and stakeholder collaboration

New urbanism

The new urbanist approach seeks to protect the design, form and character of the coastal environment, using private sector initiatives to design and create the aesthetics of specific sites on the waterfront. Although it promotes a compact built form and the human scale, new urbanism is not concerned with regional growth management or land economics goals of smart growth. New urbanism allows for both water and non-water uses while protecting and restoring the natural landscapes and ecological systems of the waterfront.

There are well documented principles of the new urbanism movement which are:[8]

- Walkability
- Connectivity
- Mixed use and diversity
- Mixed housing
- Quality architecture and urban design
- Traditional neighbourhood structure
- Increased density
- Smart transportation
- Sustainability
- Quality of life

Placemaking is a growing movement with no set definition and it is still open to various interpretations.[9] It is concerned with the creation, management and programming of spaces to increase their accessibility and ability to facilitate social interaction or economic exchanges between friends, cultures and land uses, both day and night. As such, it is a central concept of all urban regeneration projects, including those on the waterfront.

Urban ecology and landscape urbanism

Urban ecology and landscape urbanism adopt a systems approach in order to understand how human and ecological processes can coexist in the urban coastal environment. The approaches suggest that the waterfront should serve both people and nature, integrating humans and non-humans in a functional and just ecosystem.

Mixed-use development is perceived as a way to plan for growth, in a manner that both protects the environment and strengthens the economy, by providing a balance between competing demands. With a clearer understanding of the relationships between land, water and humans, as well as changing development conditions created by population growth, demographic changes and declining natural resources, policymakers can effectively determine the good and bad effects of mixed-use development on the value and use of waterfront land.

The renewable energy resources (such as solar, wave and wind) and walking and cycling opportunities on the coast can help reduce dependence of the waterfront on fossil fuels. Treating stormwater runoff, before discharging it to the sea, can help restore the aquatic habitat and provide the public with safer contact recreation with the water.

Progressive risk reduction

Progressive development and risk reduction is an incremental approach to address the ever-changing shifts in the landscape of the urban waterfront. It allows for progressive improvements, with risk reduction set as a long term goal. It requires new developments to progressively adapt to changing social and economic conditions while avoiding being exposed to risks. This effectively helps reduce the level of coastal hazard risks over the intended serviceable lifetime of the waterfront. Progressively, the level of risk to existing development is reduced over time.[10] The policy direction for coastal hazards is discussed in Chapter 9.

Silo Park, Wyndyard Quarter, Auckland

BEST PRACTICE DESIGN ELEMENTS

Development designed to promote a sustainable urban waterfront can include the following elements:

STRENGTHEN CONNECTIONS WITH THE WATER

Reinforcing the connection of the development with the water, visually and physically, can help increase public access and use of the coast and protect activities that heavily rely on the water.

Key points to consider:

- Parking is located at a distance to encourage walking or cycling to and along the coastline
- Sightlines to the water are enhanced through roads, laneways, linear parks, buildings decreasing in height and public spaces orientated towards the coast
- Water-dependent activities for the public and businesses, and intertidal marine ecosystems, are given priority to use appropriate areas of the coastline
- Public open spaces and features such as tidal steps, lookout points and fishing platforms are provided to encourage public connection with the water and to help retain natural processes in a modified environment
- Existing and authentic water-based activities, such as fishing, marine activities and public transport, are integrated into the design and this helps to provide interest and vitality and to reinforce connections to the water.

Desirable example **Waterfront Walkway and Cycleway, Auckland**

The project will create six kilometres of continuous walkway and cycleway across the waterfront, to encourage walking and cycling, increase access to the coastline, provide sightlines to the water (for example Daldy Linear Park) while protecting, where appropriate, the commercial use of the water's edge.

BEST PRACTICE DESIGN ELEMENTS (continued)

SOFTEN THE COASTLINE

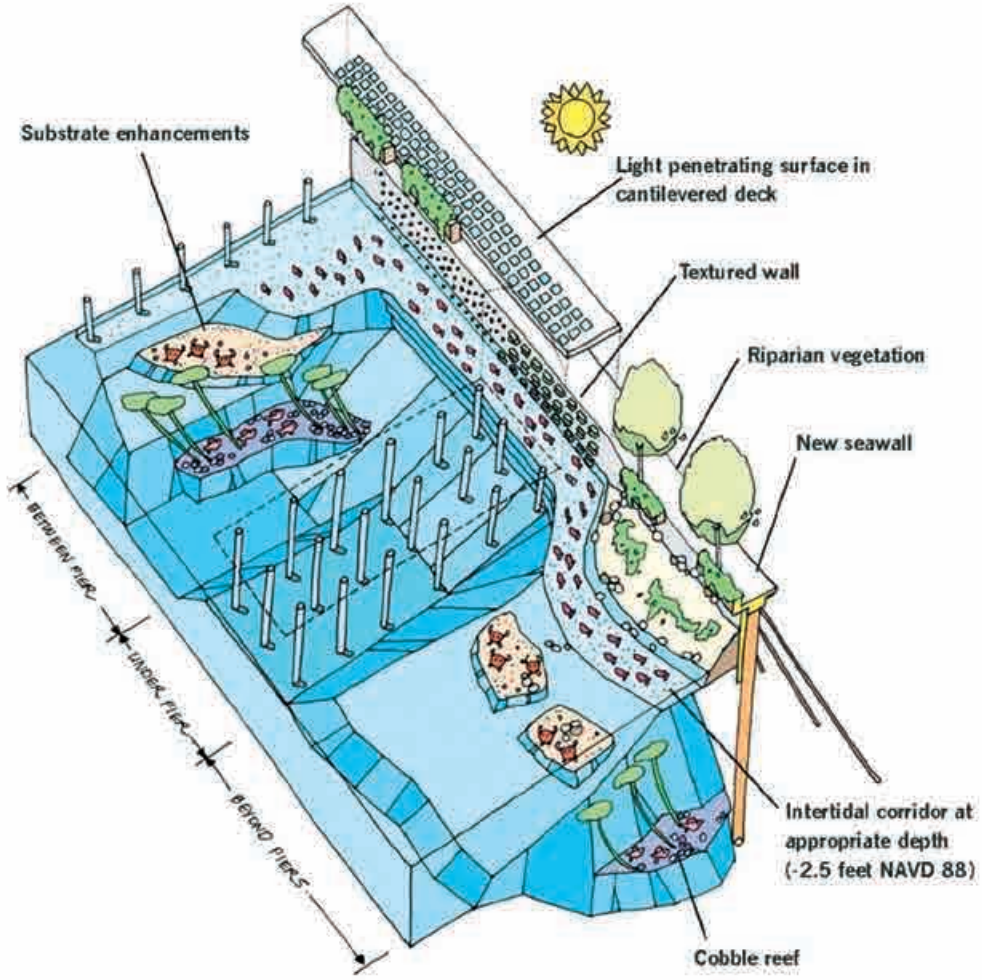
By retaining and enhancing green spaces and natural features along the water's edge, waterfronts can help enhance the marine ecosystem, improve water quality and amenity, provide new recreational and lifestyle opportunities, and increase resilience against the risks of coastal hazards.

Key points to consider:

- Natural vegetation and beaches are retained where possible
- Foreshore areas are revegetated with native planting where practicable
- Public parks and open spaces are mostly located along the coastal edge

Desirable example **Elliott Bay Seawall, Seattle, USA**

The seawall is being built not only to reduce the risks of coastal storm and seismic damage, but also to restore the ecosystem through substrate enhancement, provision of riparian vegetation, and building light-penetrating sidewalks that provide lighting to the intertidal bench and textured wall underneath.



BEST PRACTICE DESIGN ELEMENTS (continued)

ADOPT LOW IMPACT DESIGN

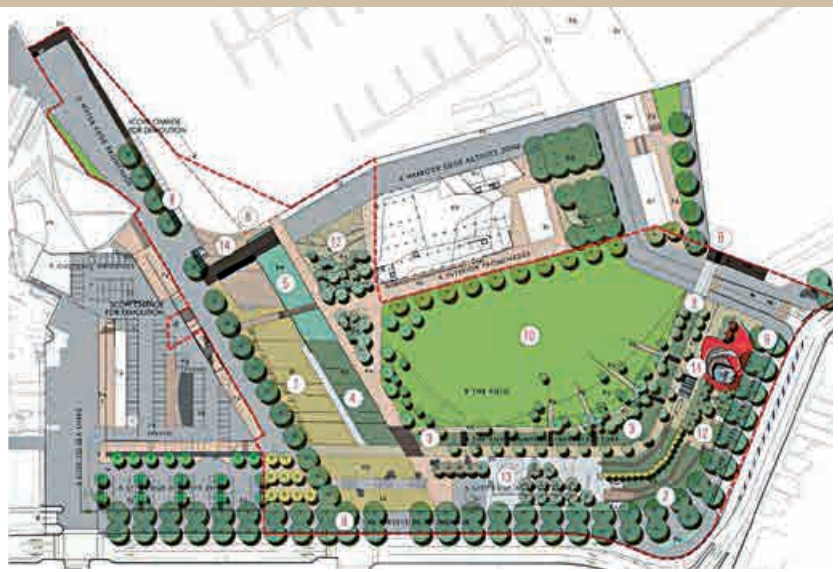
Incorporating low impact or water-sensitive design in urban coastal development can help reduce the adverse effects of stormwater runoff and drainage on the environment, enhance ecological values and increase the visual and recreational amenity of the coast.

Key points to consider:

- Low impact design devices are integrated where possible across the waterfront
- Only treatment and storage (rather than infiltration) of stormwater are to be used in contaminated brownfield sites
- Runoff from new development is minimised by building curbless, gutterless and narrower streets, and using green roofs, green walls, swales, rain gardens (bio-retention cells), tree box filters and innovative materials like porous concrete, permeable pavers or recycled site furnishings
- Low impact design techniques are integrated within streets and open spaces so natural processes and associated vegetation can be seen and understood

Desirable example Waitangi Park Wetland, Wellington Waterfront

The 6.5 hectare recreated wetland significantly increases the quality of urban stormwater by subjecting it to daylight, natural and engineered filtration systems and storage before it is discharged into the harbour or re-used for irrigation.



Key

1 Stormwater collection (offsite)
2 Sub-surface wetland
3 The Stream
4 Polishing wetland
5 Storage pond
6 Stream discharge point
7 Rocky coast garden
8 Graving Dock
9 Street-side promenade
10 The field
11 Children's playground
12 Petanque court
13 Skatepark
14 Canoe landing beach

BEST PRACTICE DESIGN ELEMENTS (continued)

PROMOTE MIXED USE AND DIVERSITY

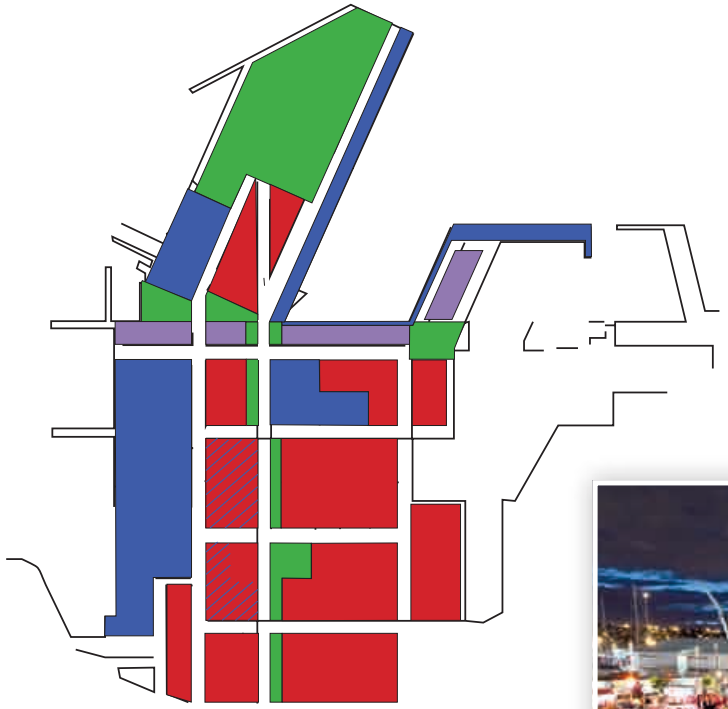
By maintaining an optimum level of diversity, in both use and form, the waterfront will be walkable, compact and more attractive to people of different ages, incomes and cultures. It will also help promote social and economic exchanges, provide vitality to public spaces at different times of the day, and increase the viability of businesses locating on the waterfront.

Key points to consider:

- A balanced mix of shops, offices, industries, activities, events and housing is maintained and orientated towards the coast
- Density is kept to a level sufficient to make the place vibrant and safe at night and day
- Water-dependent activities are protected from reverse sensitivity issues created by mixed uses
- A diversity of public open spaces are provided which support physical activity, place making and local communities

Desirable example Wynyard Quarter, Auckland Waterfront

Wynyard Quarter is expected to accommodate between 2,500 and 4,000 residents and between 12,000 and 15,000 workers in a diverse environment with public, retail, office, entertainment, fishing, marine industrial and residential uses, all set in a 37-hectare area of waterfront land and within a three-kilometre long coastal frontage.



Source: Waterfront Plan 2012, Waterfront Auckland

Silo Park, Wynyard Quarter, Auckland

BEST PRACTICE DESIGN ELEMENTS (continued)

RECREATE THE NATURAL AND HISTORIC CHARACTER

Promoting design, function and activities that reflect the history and context of the coast can help protect the environment from drastic changes to the natural landscape, historic heritage and habitat. It can also help to develop a strong sense of place that makes a waterfront distinctive and attractive.

Key points to consider:

- Quality restoration and adaptive reuse of heritage buildings, marine structures (such as North Wharf at Wynyard) and spaces by the water's edge are encouraged
- Development is designed to minimise visual and physical impact on the natural and historic character
- Historic landscape character is revealed through innovations in the use of materials, public art, activities, events, native planting, place names, vistas, signage and urban form
- Opportunities for new types of open spaces and publically accessible water edge conditions are embraced

Desirable example Jellicoe Precinct, Auckland Waterfront

The 3.7 hectare precinct embraces the historical and gritty experiences of a working waterfront through the adaptive reuse of structures such as warehouses, slipways, silos and shipping containers; the retention of artefacts like rail tracks, bollards and salvaged seawall stone; and the use of structures, public art, planting, play equipment and events that depict the history, culture and nature of the coastal environment.

BEST PRACTICE PLANNING ELEMENTS

Regional and district plans can incorporate the following elements in order to address the environmental issues surrounding urban coastal development:

MAP OUT NATURAL AND HISTORIC ASPECTS TO BE PROTECTED

Giving special planning attention to important aspects of the natural and historic character of the waterfront can help protect ecological, amenity and cultural values. It can also protect traditional water-dependent activities and offer opportunities to provide a sense of place and continued access for future generations.

Key points to consider:

- Priority is given to protecting natural and historic areas, character, the overall "look and feel", and view shafts that are socially, ecologically and economically significant and at risk of being affected
- Viability of retaining natural and historic elements is investigated in the context of the social, environmental, economic and cultural outcomes sought
- Protected natural and historic character is reflected in new developments through the use of public art, structures, activities and materials that connect the old with the new and promote diversity.

Desirable example **The Auckland Waterfront Heritage Study 2011**

Salmond Reed Architects Limited identified and mapped out Māori, colonial and natural heritage features, as well as ecological, geological and archaeological sites on the waterfront, to help protect and celebrate heritage in the future through the waterfront planning process.

BEST PRACTICE PLANNING ELEMENTS (continued)

PROMOTE COMMUNITY INVOLVEMENT

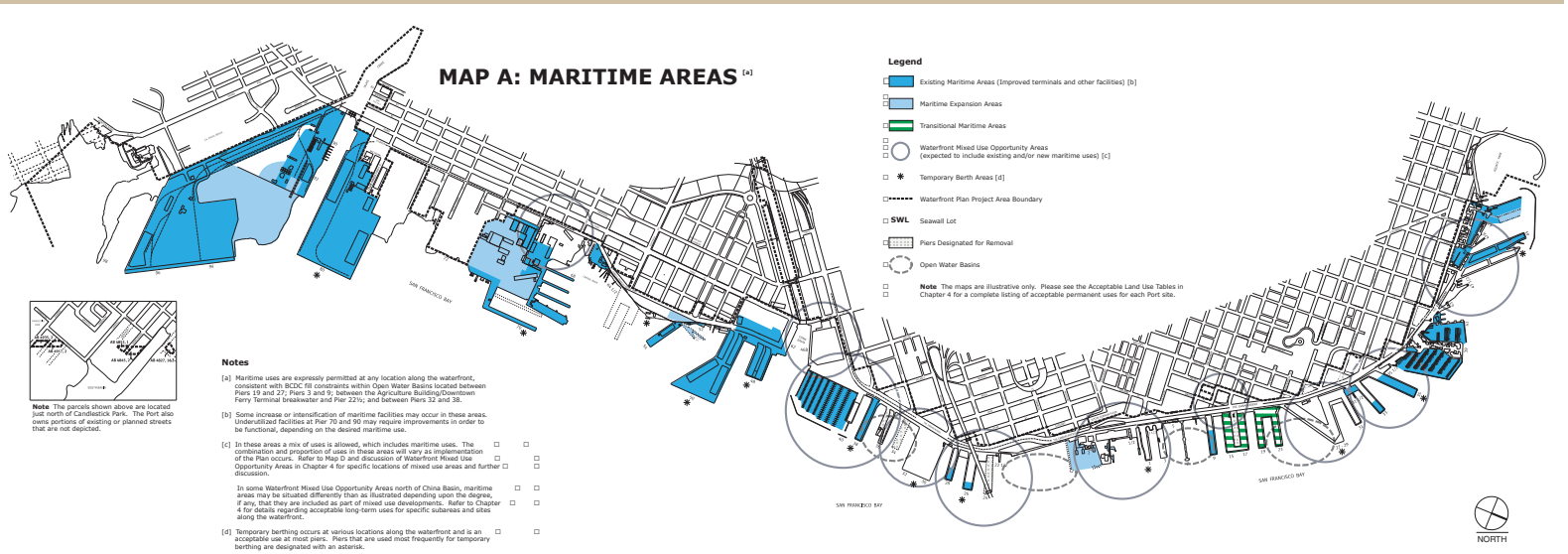
Promoting and sustaining stakeholder engagement and collaboration throughout the planning process can help to establish community buy in to waterfront redevelopment. It assists with determining the underlying issues and impacts and in resolving the allocation, function and connection between land and water uses. It also assists with gaining agreement on the identity and role of the waterfront within the city. Successful public engagement facilitates effective administration of the development process and helps to avoid adverse reactions to it.

Key points to consider:

- Focus regular and steady involvement on limited yet attainable goals in the beginning, while gradually making results visible
- Strongly support the development of public-private partnerships to assist with land use integration and implementation
- Emphasise the restoration of water and coastal quality, and provide openness and accessibility to the public, acknowledging that the coast is an important resource of the city
- Ensure that development decisions are predictable, fair, cost-effective and implemented through consistent policies and coordinated permitting processes
- Involve stakeholders in mapping and developing risk responses to determine their level of exposure to risk, their social or economic vulnerability to it, or concerns about the planning process
- Employ good public relations and communications that can reach a wide cross-section of the community

Desirable example San Francisco Waterfront, USA

The Port of San Francisco engaged an independent party to resolve conflicts between users on noise, traffic and parking issues. This provided stakeholders with a sense of justice, impartiality and transparency, which resulted in a plan that successfully describes acceptable and unacceptable land uses, and opportunities for mixed uses.



BEST PRACTICE PLANNING ELEMENTS (continued)

USE STRATEGIC PLANNING TO PROVIDE THE BASIS FOR RESOURCE ALLOCATION

Applying strategic planning to urban coastal development can result in a coherent and pragmatic plan that clarifies the relationship between uses, applies an ecological approach which addresses the needs of both the coastal environment and urban development, and creates a general consensus in defining the sustainability outcomes for the waterfront.

Key points to consider:

- Direct infrastructure and activities towards benefiting existing and proposed communities
- Focus planning on increasing efficiency in the use of finite land and resources, minimising adverse visual and physical impacts on the coastal environment, and balancing the interface between public and private use
- Ensure a clear distinction between areas where protection is encouraged and areas where change is acceptable

Desirable example

Wynyard Quarter Plan Changes, Auckland

Formal statutory plan changes for Wynyard Quarter (Plan Change 4 of the Auckland City District Plan and Plan Change 3 of the Regional Plan Coastal) followed and complemented a comprehensive process of strategic planning. This included the preparation of:

- The Auckland Waterfront Vision 2040, Urban Design Framework, Sustainable Development Framework, Transport Plan for Wynyard Quarter and considerable stakeholder participation
- Vision 2040 set out the framework for the desired community outcomes
- The Urban Design Framework provides the design principles that will help integrate the site into its unique coastal setting
- The Sustainable Development Framework establishes targets based on meeting a quadruple bottom-line
- The Transport Plan constrains the supply of parking and road space

In combination they all help to ensure a balanced allocation of land uses in Wynyard Quarter.

BEST PRACTICE PLANNING ELEMENTS (continued)

SET APPROPRIATE ZONING AND ACTIVITY CLASSIFICATION

Setting site-specific rules for building, materials, zoning and activities can assist with:

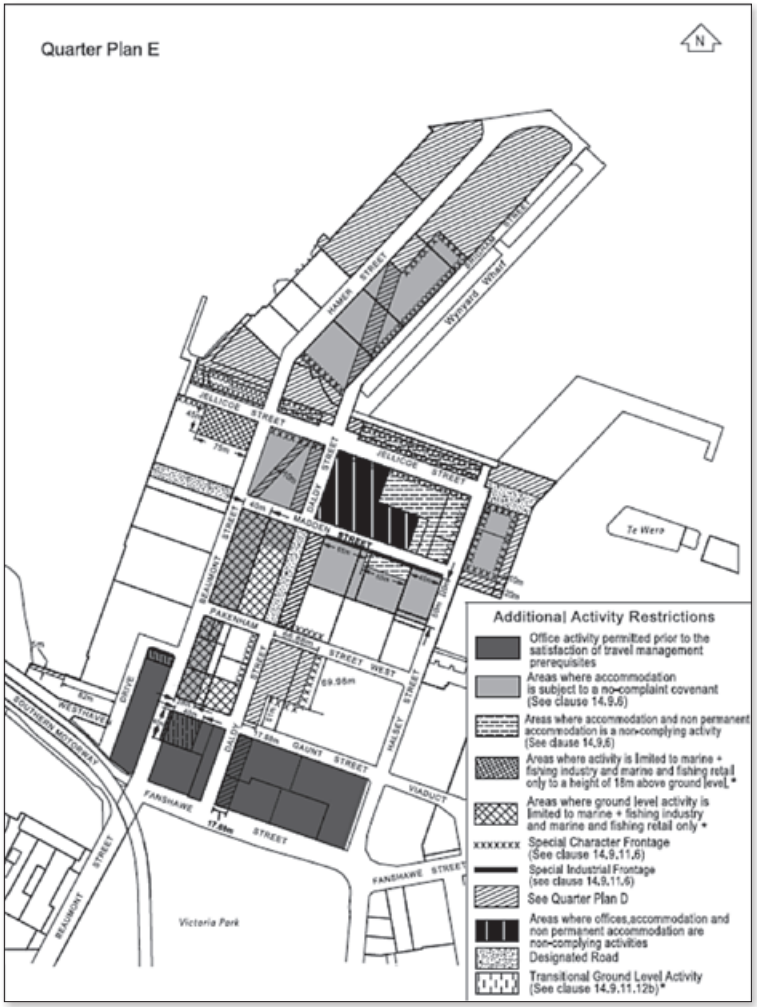
- Visioning by distinguishing and defining the interface between the acceptable and prohibited, public and private, built and open, passive and active, urban and coastal, and temporary and permanent
- Resolving conflicts in use and form
- Managing the balance between cultural, social, commercial and environmental needs
- Protecting the maritime setting

Key points to consider:

- Mixed use is given permitted activity status to increase pedestrian access to the water, made controlled to establish and maintain cohesive waterfront activities, or made discretionary or non-complying in some areas to minimise adverse environmental impacts
- Water-dependent public, cultural and economic activities are given priority over the use of the coastline, but controlled to address cumulative effects and reverse sensitivity issues
- Existing natural character, historic heritage and view corridors to the water are protected

Desirable example **Auckland Council City District Plan Operative Auckland City – Central Area Section 2005**

Part 14.9 uses activity classification, integrated planning, assessment criteria, development controls and financial contributions to address the issues onsite and in the wider social, economic and environmental context. This is in order to protect maritime use, to allow for mixed use, and to promote progressive redevelopment.



Downtown, Auckland City

BEST PRACTICE PLANNING ELEMENTS (continued)

INCORPORATE RISK RESILIENCE

Chapter 9 (Managing coastal hazards) provides the best practice planning elements to address natural coastal hazards. Regional and district plans can introduce policies to adapt, protect and increase resilience of existing infrastructure, private property and public accessibility of urban coastal development, against risks of reversible and irreversible effects of contamination, climate change and natural hazards.

Key points to consider:

- Predictions on risk, insurance and related issues need to be understood and estimated, regularly monitored, mapped, agreed and planned for reduction, readiness, response and recovery
- An independent multidisciplinary review process can be adopted to incorporate scientific and technical risk resilience expertise in planning and monitoring new and existing development
- Remaining natural systems and vegetation that provide natural defences should be protected or replaced with equivalent hard infrastructure solutions, with corresponding rules
- Carbon dioxide emissions can be reduced through policies that encourage on-site energy generation, low impact public transport and sustainable building, with expected targets
- Water quality should be regularly monitored for contamination by shipping, industry, development and dredging activities and impacts on aquatic habitats and humans, with expected site-specific targets
- Elevated buildings, where found appropriate, should encourage walkability and be sympathetic to the existing character and form of the coastal environment
- Street and transit systems should be designed to provide options for evacuation during disasters
- Infrastructure should be provided to ensure wastewater overflow does not mix with the stormwater system or contaminated land, and allow for fast drainage

Desirable example

Climate Change Impact Statement, Queensland Government, Australia

The Department of Environment and Heritage Protection requires proponents of any project, policy or legislation seeking state approval to produce a Climate Change Impact Statement. The government prepared a 14-step risk management plan template to assist proponents in preparing such statements.

Table 6. Consequence categories for assessing impact risk for economic, natural resource and social success criteria

	Profitability and growth	Natural resource sustainability and environment	Supply chain and market	Lifestyle and community	Public safety
Catastrophic	Business would be unprofitable and contract markedly making it unviable. Business would have to be wound up.	Extreme, permanent and widespread loss of environmental amenity and progressive irrecoverable environmental damage	Loss of a key source of supply or market threatening the business	The region would be seen as very unattractive, moribund and unable to support its community	Large numbers of serious injuries or loss of lives
Severe	Business would be unprofitable and contract markedly and would likely become unviable even with significant remedial action	Severe, semi-permanent and widespread loss of environmental amenity and likelihood of irrecoverable environmental damage	Severe disruption of a key source of supply or market having a serious effect on the business	Severe and widespread decline in services and quality of life within the community	Serious injuries or loss of lives occurs routinely
Major	The business would be unprofitable and contract and require significant remedial action to remain viable	Major, semi-permanent loss of environmental amenity and danger of continuing environmental damage	Major disruption of a key source of supply or market having a significant effect on the business	Major and widespread decline in services and quality of life within the community	Isolated instances of serious injuries or loss of lives
Moderate	The business would only be marginally profitable with growth stagnant	Isolated but significant instances of environmental damage that might be reversed with intensive efforts	Components of the supply chain and market would require more than normal levels of management attention to protect the business	General appreciable decline in services	Small numbers of injuries
Minor	The business is profitable and growth is achieved but they both fail to meet expectations	Minor instances of environmental damage that could be reversed	Isolated difficulties would arise in the supply chain and market but would be resolved	Isolated but noticeable examples of decline in services	Serious near misses or minor injuries

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Waterfront, Auckland

PART THREE

Urupukapuka Island, Bay of Islands

Kaikōura, Canterbury

BEST PRACTICE DESIGN FOR COASTAL LAND DEVELOPMENTS

14

Mountain Landing, Bay of Islands

IN THIS SECTION...

INTRODUCTION

This chapter has been provided to assist people who are involved in the practical aspects of developing land within the coastal environment and who wish to incorporate best practice coastal design elements into their development. Chapter 15 identifies the characteristics of best practice coastal planning to assist councils in developing policies and plans to support developers in achieving positive outcomes for the coast.

There are some key questions that need to be addressed when designing coastal development, which are:

- Should there be development on the site at all?
- If the answer is yes, where on the site should there be development, at what density and of what type?
- How can the design serve to preserve, enhance and restore important natural and cultural values of the site?
- How can the design foster sustainability in the long-term?

These questions can be answered by adopting a design process which incorporates three conceptual stages:

- ✓ Identify
- ✓ Maintain and enhance
- ✓ Create

How much work is required for each of these stages will depend on the characteristics of the land and the surrounding coastal environment. Larger projects will require more sophisticated assessment and design than smaller projects.

Bream Tail, Whangarei District

DESIGN PROCESS

Identify

The first stage of good design is to develop an in-depth understanding of the land. This is likely to take some time and require several technical studies and consultation with affected parties. It includes a full understanding of the following contexts:

- Wider physical context – the relationship between the site and the land backdrop, the coastline and other settlements
- Wider planning context – how the site is affected by council strategic objectives
- Tangata whenua context – the tangata whenua relationship with the land, historic and cultural sites, kaimoana resources and access linkages between marae, land and the sea
- Community context – the aspirations, issues and concerns of directly affected parties and the community more generally
- Immediate physical context – the geology, landforms, ecology, water and landscape characteristics of the site and any technical constraints such as vulnerability to coastal and other hazards, slope and stability
- Immediate planning context – planning provisions and controls which apply to the site
- Infrastructure needs – compatibility of the development with existing infrastructure
- Market context – likely buyers of the site and their preferences

This stage includes identifying sensitive areas and features of the site. A useful way to locate these areas spatially is through layering available information on a GIS platform. This enables the initial identification of areas which will not be suitable for development and areas which may be. Larger projects may require more sophisticated modelling in order to predict potential environmental effects.

Maintain and enhance

This stage includes identifying how the sensitive and important areas on the site can be enhanced through measures such as fencing, replanting and weed and pest control. Features which merit consideration for maintenance and enhancement include:

- Areas of outstanding natural character and outstanding natural landscapes – through avoiding development in these areas and legally protecting them to prevent future development
- Landscapes which contribute to amenity values and areas with high natural character – through avoiding intrusive development in these areas and legally protecting them to prevent future intrusive development
- Areas of significant indigenous vegetation and habitats – through minimising vegetation clearance, covenanting them to avoid future development and implementing effective weed and pest control measures
- Ecologically significant areas (such as the coastal edge, waterways, drainage areas and connective strips) – through minimising impacts on these areas and undertaking replanting and rehabilitation work
- Public access – through providing an effective means for members of the public to access the coast
- Areas of significance to iwi – through appropriately managing development in these areas and providing access to them for iwi
- Areas of cultural and historical significance – through avoiding development in these areas and permanently protecting them

Whangaruru, Whangarei District

DESIGN PROCESS (continued)

Sensitive or important areas can be permanently protected by several mechanisms including:

- A restrictive covenant, which is registered on the certificate of title of the property, in favour of adjacent or nearby land
- A memorandum of encumbrance, which is a form of mortgage registered on the title of the property, and which creates a rent charge in favour of another party. This is not enforced if the landowner complies with a covenant not to subdivide the land. This can be used when there is no suitable adjacent land to receive the benefit of a restrictive covenant
- A conservation covenant under the Reserves Act, which can be used to preserve the natural environment or landscape amenity
- An open space covenant under the Queen Elizabeth II National Trust Act, which can be used to preserve a landscape of aesthetic, cultural, recreational, scientific, scenic or social interest or value
- A heritage covenant under the Historic Places Act, which can be used to protect an historic or wāhi tapu place
- A consent notice under the Resource Management Act, which is imposed as a condition of subdivision consent and imposes legal obligations that can be registered on the certificate of title of the property

Create

The final step in applying a 'best practice' design approach is to create a coastal development which is sustainable in both the short and the long term. This is likely to include:

- Taking an innovative approach, both to the overall design and to the building form, which adopts both a New Zealand and local coastal style
- Reducing the bulk of the buildings and using natural and non-reflective materials and colours
- Using smaller house sites within wider covenanted areas and common land
- Keeping buildings and infrastructure well back from the coastal edge
- Keeping buildings and infrastructure off headlands and prominent ridgelines
- Maintaining and enhancing vegetation that can soften the effects of the development, and thus lessen impacts on the area's natural character
- Incorporating sustainable engineering and building forms that minimise energy and water use and effectively manage waste
- Minimising the impacts of associated infrastructure through careful location (such as minimising cuttings required for roads and access ways), and using rural standards such as low or no street lighting, narrow roads and unpaved surfaces
- Future proofing the development, including access to it, from predicted sea level rise effects over at least 100 years[1]

Ōmarino, Bay of Islands

BEST PRACTICE ELEMENT CHECKLIST

The following provides a checklist summary of the key best practice elements that should be incorporated into a coastal development in order to achieve positive outcomes for the coastal environment and the wider community. Each of these elements is discussed and explained in further detail in Part Two and examples are provided to help demonstrate the value of including such features.

Element	Preserves natural character	Protects landscape and amenity values	Addresses sedimentation and pollution	Protects coastal biodiversity	Manages coastal hazards	Maintains and enhances public access	Protects Māori interests	Safeguards historic heritage
Retain natural landforms	*	*			*			
Design buildings to positively support the coastal setting	*	*						
Set, retain and restore generous setbacks and buffer areas and minimise encroachment into reserve areas	*	*	*	*	*	*	*	*
Enhance and revegetate native coastal vegetation	*	*	*	*	*			
Maintain natural coastal processes	*			*	*			
Avoid buildings and structures in outstanding and sensitive areas	*	*		*			*	*
Permanently protect valuable landscape, amenity and biodiverse areas	*	*		*		*		
Incorporate sediment retention mechanisms into earthworks	*		*	*				
Reduce hard surfaces and ensure hydraulic neutrality	*		*	*				
Prohibit domestic pets in subdivisions near sensitive coastal areas				*				
Adopt soft protection measures and removable structures near to the foreshore	*			*	*	*		
Undertake a cultural or heritage impact assessment							*	*
Identify and incorporate important Māori values into development							*	*

CASE STUDIES

These case studies offer some examples of integrated design which address many of the issues discussed in the preceding chapters and develop further the concepts that are critical to achieving a best practice coastal development.

Whilst it is recognised that these case studies might not excel in every facet, they offer important models where many of the elements of good practice discussed in the specific topics are brought together in a cohesive manner.

Mātauri Bay development, Northland

The Mātauri Bay development in Northland is an example of a sensitively-designed private coastal development project. The land at Mātauri Bay has always remained in Māori ownership but, through the legal process of individualising title to customary land, the land has been subdivided into nineteen separate lots. An incorporated society was set up in the late 1960s to manage the land. This worked well until the 1990s, when the land was used as security for an outside venture that subsequently failed. This provided the impetus to develop the land in a manner which would generate funds to repay the loan whilst retaining the underlying ownership of the property.

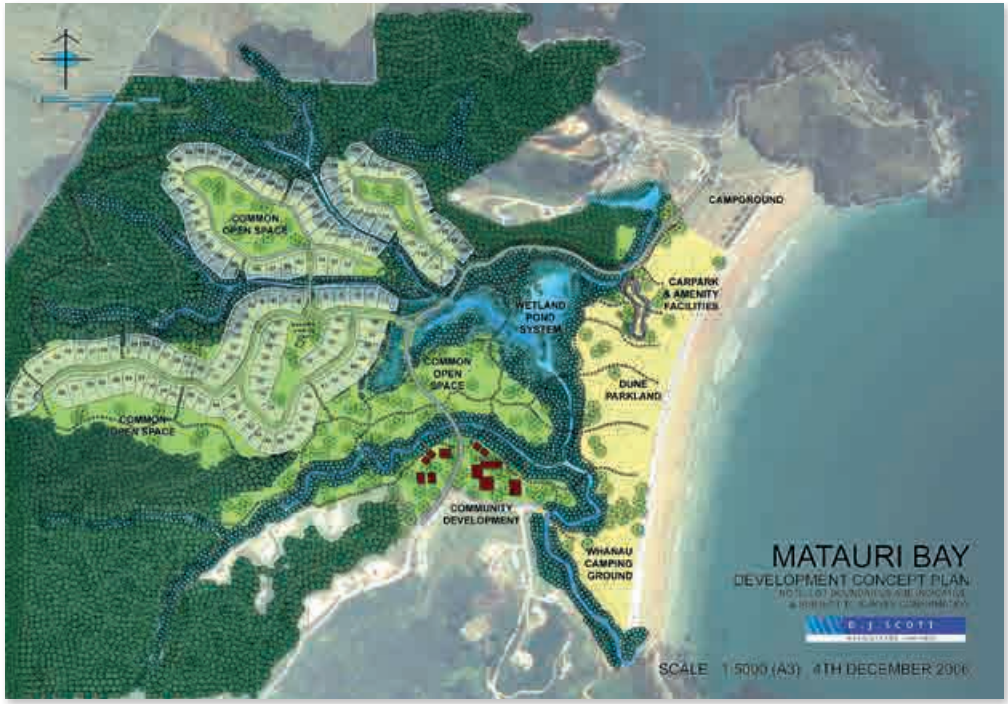
Some initial concepts for the site showed a mass of housing right along the beachfront. Some prospective development partners also proposed small sections, of around 650 square metres each, which would enable more lots to be created in the highly-sought-after beachfront area.[2] This did not sit well with the Māori owners so a joint venture was put together and an alternative development concept developed.

The development model which was finally adopted set the houses on the hillside above the beach, but well below the ridgeline, and around half a kilometre from the coastal edge. All houses require approval from a design control committee, and the use of natural materials such as stained wood is encouraged, with brick and plaster and painted wall cladding banned. Perimeter fencing is also excluded with the new occupiers encouraged to use softer planting for privacy and screening. This was to enable people to live in an open park-like setting.

Twenty-six hectares of indigenous forest was set aside for protection, and the wetlands and sand dunes along the coastal edge are to be restored. No cats or dogs are permitted in the subdivision due to the extensive kiwi population in the area. Public access to the beach is facilitated through the provision of a large public carpark and creation of legal public road access to the coast (whereas previously the access road was privately owned).

The development was seen as an opportunity to celebrate the Māori heritage of the bay, and there are plans for an information centre where stories and histories associated with the place will be told through weavings, carvings and paintings. The new sections being created are leasehold so that the Māori owners will retain the underlying land ownership.

Although the coastal landscape would have remained more natural if the bay had not been developed at all, this was probably not a feasible option if local Māori were to retain ownership of their land. The development model which was adopted sought to accommodate the interests of the local community, the general public and the long-term landowners, whilst minimising visual impacts on the coastal landscape and restoring and protecting important coastal ecological systems.



Ōmarino development, Bay of Islands

On the eastern coast of the Bay of Islands, the Ōmarino development provides house sites within a regenerating conservation area. It is protecting 110 hectares of replanted native bush and includes covenants to prevent future subdivision. A wetland, which is the habitat of the rare native brown teal, is also being protected, and archaeological and cultural heritage sites of significance to the hāpu from Rawhiti have been recognised.

Purchasers are required to join a residents' association, which has a legal obligation to implement a management plan. This plan contains detailed landscape plans, specifications for managing and implementing revegetation of the site, and an ongoing pest and predator control programme. There are detailed controls on building design and location. Covenants on the property titles are designed to prevent future subdivision.[4] Considerable effort was put into ensuring the development was in keeping with the rural coastal character of the site, including the creation of low key internal access roads and inconspicuous road signage.

Tangata whenua have been given formal access to archaeological sites, other wāhi tapu and heritage covenant areas. Public access has been provided to a small area of foreshore in one of the smaller bays adjoining the site, enabling boaties to land. A proposal to provide a public walking track to a headland pā from this area was opposed by the local hāpu and did not proceed. So whilst the public will continue to be excluded from much of the property's privately-owned coastal land there have been other significant gains as a result of the ecological restoration work and protecting Māori interests in this area.

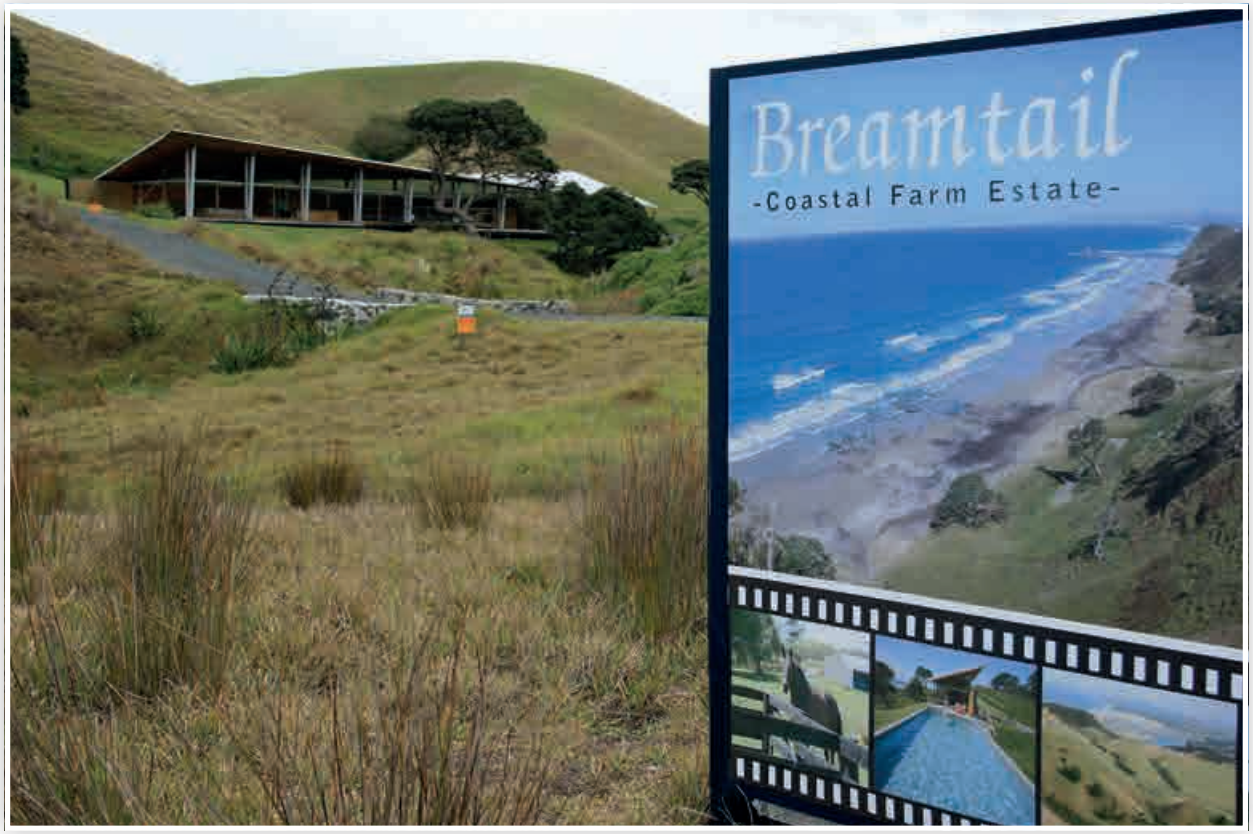
Ōmarino, Bay of Islands

CASE STUDIES (continued)

Bream Tail, Mangawhai Heads

The Bream Tail development is a high quality residential enclave located just north of Mangawhai Heads, providing up to 40 homes within 459 hectares of coastal land. It is a master-planned development designed to site private residential houses within spectacular coastal landscapes, beaches, farmland, conservation reserves and wildlife. The area has been described by ecologists as "iconic".[5] The principal objective for the development has been to preserve the high quality of the property's natural assets, and to enable the owners to enjoy them, whilst also providing for public access. Over $1.5 million is being spent on conservation. Design guidelines are intended to ensure that buildings contain a degree of design integrity that is in keeping with the landscape and the character of the property as a whole.[6] Common facilities have been located and designed to fit within the existing coastal landforms, being tucked into a valley and with the length of the frontage directly facing the sea minimised.

Public access through the development is incorporated via the Mangawhai Walkway, which is part of the much larger national Te Araroa walking route. Located adjacent to Mangawhai Heads, it provides the public with an opportunity to view and access parts of the coast which have previously been locked up as private land.



Bream Tail, Whangarei District

Te Araroa Bream Tail, Mangawhai Map

Mountain Landing, Purerua Peninsula

Mountain Landing is a very different kind of development, which seeks to reconcile public and private interests on some of the most historically significant land in New Zealand.[7] The area was attractive for early human settlement because of its productive land and abundant marine life, and there is evidence of occupation dating back at least 400 years. Numerous early Māori settlements were located on the property and there are a number of sites of particular cultural and heritage importance.[8] The land where these are located is held in a charitable trust to ensure their future preservation.

In 2000 the 338-hectare property was bought by Peter Cooper who wished to create a development model which would allow the land to be kept intact. He set up a sustainable working farm, with the coastal edge and wetland area protected and restored, and the stock kept out of the remaining areas of native bush. He then designed a subdivision that included 39 house sites and 12 hectares of covenanted heritage areas. Pest management and habitat enhancement programmes have been in place on the property since 2002.

All the home and landscaping design at this development is subject to a stringent set of design guidelines. These seek to reduce the impact of buildings on the surrounding landscape and encourage owners to use natural materials and colourings for their building materials. The observance of these design principles is overseen by a Design Review Board.

There are many rare and endangered native birds that are living within Mountain Landing's wildlife sanctuary areas, including a thriving population of kiwi. Over 20 endangered pateke (native brown teal) were released at the property in 2011 as part of the Department of Conservation's pateke recovery programme. Since then, ducklings have hatched and another release is planned with the aim of establishing a fully self-sustaining breeding colony.[9]

Mountain Landing, Bay of Islands

Cooper designed a development which created 'islands' of land (shown by the blue outlines) which could be sold while retaining the balance of the land (boundary shown by the red dotted line) in single ownership to be managed as a sustainable working farm

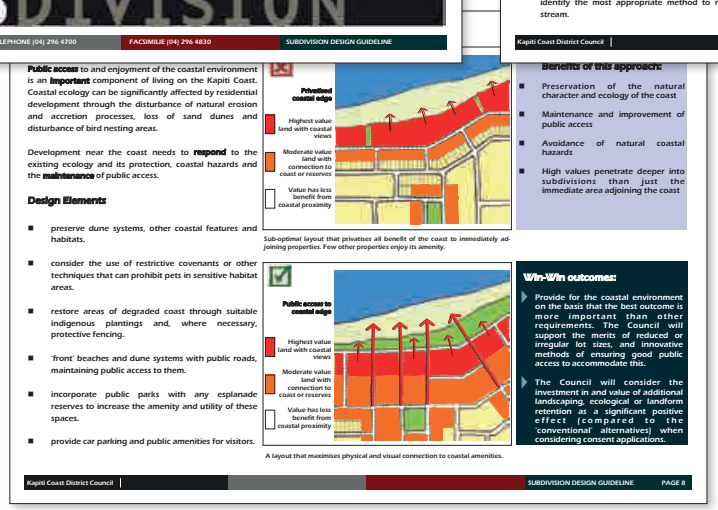
Mountain Landing, Bay of Islands

CASE STUDIES (continued)

Kapiti Coast District Council Best Practice Subdivision and Development Guide

The Council has prepared these guidelines in order to promote responsive and innovative development design that will deliver improved community environments. The guidelines address such matters as designing with the landscape, responding to the coastal landform, managing earthworks and incorporating low impact infrastructure design.

The guidelines encourage developers to respond positively to the coastal landform through preserving dunes and other coastal features, restoring degraded habitats, and incorporating public roads and parks along the beachfront. In order to encourage developers to adopt these approaches, the Council indicated that it will support the merits of reduced or irregular lot sizes and consider the positive effects of investment in additional landscaping, ecological or landform retention.[10]



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Hopper, L, 2012, *A developers perspective on coastal development in NZ* (unpublished), available at http://www.conferenz.co.nz/content/whitepapers/2012/leigh-hopper.pdf

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FOOTNOTES

1 Refer to the recent Environment Court decision on subdivision at Kina (*Carter Holt Harvey HBU vs Tasman District Council* EnvC 2013)
2 Peart R, 2009, 249-250
3 Peart R, 2009, 249-250
4 Peart R, 2009, 150
5 http://www.williamsland.co.nz/images/Breamtail.pdf
6 http://www.williamsland.co.nz/images/Breamtail.pdf
7 Peart R, 2009, 251
8 http://www.mountainlandingnz.com/history
9 http://www.mountainlandingnz.com/whats-new
10 http://www.kapiticoast.govt.nz/Documents/Downloads/Best-Practice-Subdivision-and-Development-Guide.pdf

Tokerau Bay, Far North District

Whakatane Harbour, Bay of Plenty

Medlands Beach, Great Barrier Island

5

CHARACTERISTICS OF BEST PRACTICE COASTAL PLANNING

IN THIS SECTION...

INTRODUCTION

This chapter has been provided to assist councils, and others with an interest in coastal planning, in developing policies and plans which help ensure positive outcomes for the coast. Both statutory and non-statutory planning documents can be used to set goals for coastal management and to provide mechanisms to help achieve them. Some of these, such as national policy statements, national environmental standards, regional policy statements and regional and district plans, are prepared under the RMA. Others, such as Long Term Plans and Annual Plans, are prepared under the Local Government Act. Yet others, such as coastal management strategies, coastal structure plans and the like, may have no statutory basis at all, but can provide a strategic planning framework to guide the development and implementation of statutory plans.

Ruakākā, Whangarei District

HOW PLANNING DOCUMENTS CAN BEST CONTRIBUTE TO COASTAL MANAGEMENT

Figure 15.1 Summary of how planning documents can contribute to coastal management

Authority for planning document	Type of planning document	Prepared by	Relevance to coastal management
Resource Management Act	Regional policy statements	Regional councils	Overview of coastal management issues in the region, and policy and methods to achieve integrated management of the coastal environment
	Regional coastal plans	Regional councils	Objectives, policies and rules applying to the coastal marine area (below mean high water springs)
	Other regional plans	Regional councils	Objectives, policies and rules applying to land and freshwater management within the catchment and specific resource management issues in the coastal environment
	District plans	Territorial authorities	Objectives, policies and rules applying to subdivision and land use in the coastal environment. May contain structure plans for localised areas
	Iwi planning documents	Iwi	Identification of coastal management issues of significance to iwi and how they can be addressed
Local Government Act	Long Term Plans	Regional councils and territorial authorities	Identification of outcomes for the coast sought by the community over the next ten years or more
	Annual Plans	Regional councils and territorial authorities	Financial provision for expenditure on coastal management and infrastructure
Non-statutory	Coastal management strategies	Regional councils and territorial authorities (singly or jointly)	Long-term direction for the management of the coast
	Urban growth strategies and other strategies (such as open space strategies, rural development strategies and harbour management strategies).	Regional councils and territorial authorities (singly or jointly)	Long-term direction for the management of urban growth which impacts on the coastal environment
	Structure plans (not incorporated into district plans)	Territorial authorities	Spatial direction on how a local area is expected to develop

Identification and mapping of important areas

Maps are a valuable tool to identify resource management issues, locate them spatially and develop appropriate policy responses. Mapping also provides a useful mechanism to link scientific and other information with the policy-making environment, and can visually present sometimes complex information in a more accessible way. In addition maps can provide greater certainty, by clearly identifying where sensitive and important environments are located, and where certain forms of development are or are not appropriate. Rules and other plan provisions can then specifically apply to these areas.

The map preparation process should involve professional assessment of the data, robust peer review, and open and transparent consultation with affected landowners and resource users as well as the broader community.

Parua Bay Structure Plan

HOW PLANNING DOCUMENTS CAN BEST CONTRIBUTE TO COASTAL MANAGEMENT (continued)

Maps can be directly included as part of policy statements and plans or can be incorporated by reference (in terms of Part III of the First Schedule to the RMA). However, not all values will be able to be mapped, either because sufficient spatial information is not available, it is not appropriate to reveal their precise location, or the value concerned does not lend itself to two-dimensional spatial representation.

The NZCPS contains a number of policies which have a spatial component, and their implementation can therefore be assisted by the incorporation of maps into regional and district policy and planning documents. In particular, there is a strong direction on the need to assess and map the following:

- The landward extent of the coastal environment, so it is clear where the provisions of the NZCPS 2010 apply within the region or district
- Important areas for preserving and protecting natural character,[1] natural features and natural landscapes[2] of the coastal environment
- Coastal resources, processes or values which require protection from adverse cumulative effects[3]
- Areas of the coastal environment where particular activities and forms of subdivision, use and development are inappropriate[4]
- Areas of the coastal environment where activities are to be provided for including urban development[5], aquaculture[6] and the operation of ports[7]
- Priority areas for restoration and rehabilitation, including areas important for indigenous flora and fauna, natural character and public access[8]
- Areas where there are opportunities to improve the quality of coastal water and water bodies[9]
- Areas which are potentially affected by coastal hazards over at least the next 100 years[10]

The RMA prohibited activity category can be used to clearly exclude activities which simply should not be allowed for in the most special parts of the coast.

Strategic planning

Policy 7 of the NZCPS 2010 indicates that councils need to set a clear strategic direction for the management of coastal development. A strategic approach to coastal planning involves articulating an overall vision of how the community would like to see their coast develop in the future and putting in place a strategic direction and mechanisms, in order to achieve that vision.

Such an approach enables the council to proactively identify areas where development is appropriate and other undeveloped or sensitive areas where development should be carefully managed or avoided entirely. It enables the cumulative impacts of development to be addressed more effectively than where management relies heavily on a case-by-case assessment of effects. In addition, a strategic direction can help to link the supply of coastal properties to demand.

This kind of planning requires a clear understanding of likely future development trends, the potential impacts of proposed development, and the sensitivity of different parts of the coastal environment to development.

Such a strategic plan can identify the following:

- The location and extent of the coastal environment
- Those parts of the coast that are inappropriate for development
- Those parts of the coast where opportunities exist for development and the nature of those opportunities
- Those parts of the coast which need enhancement or regeneration

Some local authorities have recognised the need to develop a coastal management strategy which addresses local coastal development issues. These strategies have no statutory basis but they can provide a strategic framework to help guide and inform the development of provisions in statutory plans.[11]

A strategic plan might lead to a finer-scaled structure plan, where the key features of the strategy are

Woolleys Bay, Whangarei District

developed in more detail at a localised level. To achieve their vision, key elements of strategic and structure plans will need to be incorporated into statutory documents such as the regional policy statement and district plan. In addition, where council financial resources are required to implement the strategy, these elements will need to be incorporated into the council's Long Term and Annual Plans.

In recognition of the issues in their coastal areas, several councils have prepared coastal management strategies, including Whangarei District Council, Wairoa District Council, New Plymouth District Council and Hastings District Council.

Integrated planning

Under the RMA, management of the effects of coastal development can be jurisdictionally fragmented between territorial authorities and regional councils and spatially fragmented between planning for land and planning for the coastal marine area. In some areas, such as the Firth of Thames and the Kaipara Harbour, a single coastal system is split between two regional councils as well as multiple territorial authorities.

Kaipara Harbour

Some integration is promoted through the requirement under the RMA that regional and district plans give effect to the applicable regional policy statement, and that all these planning documents give effect to the NZCPS 2010. However, such integration tends to be at a broader level rather than at a detailed management level. Policy 4 of the NZCPS 2010, which is discussed in Chapter 4, seeks to promote better integration of coastal management.

Integrated statutory plans under the RMA have been developed in some areas to address district and regional council responsibilities for land and marine areas. This enables more effective planning to address the range of issues generated by use of the coastal environment in an integrated manner. It also enables conflicting outcomes to be reconciled.

At the time of writing there are prospective reforms to the RMA which provide for a single plan to be prepared for each region which would incorporate the regional policy statement and regional and district plans. The proposal requires regional and district councils to develop their plans as they currently do and then insert their respective sections into a single plan or a "virtual" plan where all the elements of various plans relate to each other (such as for a particular property). This should result in all the statutory planning material relating to a particular region being located in one place, and so should make it easier for developers and members of the public to access it. It could also lead to the better integration of planning itself, if the councils work together during the plan development stage.

Some examples of integrated planning include:

- The Marlborough Sounds Resource Management Plan which is a combined plan addressing district and regional responsibilities for land, freshwater and the coastal marine area (see www.marlborough.govt.nz).
- The Canterbury Regional Coastal Environment Plan which provides for the integrated management of the coastal marine area, the active coastal zone and the land backdrop (see www.ecan.govt.nz)
- The Bay of Plenty Regional Coastal Environment Plan which contains rules that regulate activities in the coastal marine area and also has objectives and policies that relate to natural character, public access and coastal hazards in the broader coastal environment. These provide guidance in the preparation of district plans and consideration of resource consent applications (see www.boprc.govt.nz)

Resource consenting

Resource consent conditions can be very effective at managing the effects of coastal development if they are robust, and are closely aligned to delivering the outcomes sought in the relevant planning document. For example, such conditions can be used, in conjunction with plan provisions, to:

- Protect and restore sensitive areas
- Keep buildings and structures off headlands, ridgelines and coastal cliffs
- Ensure houses are designed to 'fit' into the coastal environment
- Ensure use of non-reflective materials and colours
- Ensure public access to and along the coast
- Encourage coastal restoration

IMPORTANT ELEMENTS

Well-informed planning

For a plan to be effective in managing coastal development it needs to be based on robust information about the nature and value of coastal resources, current and likely future pressures on them, the sensitivity of the resources to the pressures, and community aspirations. In areas where there is a recognised risk of coastal erosion and other hazard risks (such as inundation and liquefaction), an understanding of coastal processes will also be relevant.

This will usually require a range of technical studies to be undertaken on issues such as natural character, landscape, biodiversity, historic heritage and coastal hazards. Tangata whenua-based technical advice may be required to adequately address issues of importance to iwi.

Effective planning is also likely to require studies of current and likely future demand for coastal development and options for meeting this demand. The development of scenarios, which illustrate the consequences of different development trajectories on the coast, can be useful in communicating information and helping to make informed decisions.

Examples of where extensive technical reports have been prepared to inform coastal planning include:

- The Bay of Plenty Smartgrowth strategy, which includes the coastal environment, was informed by a range of technical papers, including ones on growth, demand for land, economic development and hazards (see http://www.smartgrowthbop.org.nz/)
- The Wairarapa Coastal Strategy was informed by eight technical reports on planning context and methods, landscape, natural environment and ecology, land use and development, access and recreation, built environment and infrastructure, hazards and heritage (see http://www.gw.govt.nz/Wairarapa-Coastal-Strategy/)
- The Whangarei District Council's Sustainable Futures 30/50 Sub-regional Growth Strategy relied on a number of background reports, including those on development drivers, constraints, natural resources, hazards and risks and responses (www.wdc.govt.nz)
- Technical reports were used to prepare the Bay of Plenty Regional Coastal Environment Plan. In particular, these were used to develop some of the schedules, such as site specific information on coastal values including landscape, vegetation, bird habitat, conservation areas and culturally significant areas

Good and early community consultation helps coastal planning to be guided by a community vision of the desired outcomes for the coast as well as by the aspirations, needs and values of the community members. A community vision may be developed through the process to prepare coastal management strategies and/or Long Term Plans. Consultation can involve displays, meetings, workshops, hui, surveys and providing the opportunity to make written and verbal submissions.

Clear planning

If a regional or district plan is to be effective, it needs to clearly set out the direction it seeks for development on the coast. General statements of intent, or the restating of sections in the RMA, provide little guidance when resource consent applications are being considered and can thus result in ad hoc decision-making.

Policies and objectives can be directive if worded accordingly. They need to clearly identify what kind of development is appropriate where and what areas within the coastal environment are not suitable for development. For example, the objectives and policies in the draft Auckland Unitary Plan make it clear that additional subdivision will not be permitted in the coastal rural zone. In addition, the Whangarei District Council is proposing to prepare a "policy-driven" district plan, where the policies determine matters such as notification of activities.

Effective methods

Many regional and district plans contain detailed descriptions of the coastal environment, but are much weaker when it comes to providing certainty for its future management. Plans need to contain sufficient rules to ensure that their desired outcomes can be achieved. For example:

- Outstanding natural landscapes and areas of outstanding natural character are unlikely to be adequately protected, unless rules are provided which control activities which impact on them, such as subdivision and coastal structures
- Voluntary methods such as the provision of education, guidelines and rates relief are unlikely to be effective on their own, particularly when considerable financial returns can be obtained from coastal development, and will need to be supplemented by statutory tools

Methods need to be carefully designed so that they both control serious threats to the coastal environment and incentivise restoration and ongoing site management to protect important values.

Monitoring

Because managing the coast is a difficult enterprise, given the sensitivity of the resources and heavy development pressure, it is inevitable that plans will not necessarily get it right. In addition, development pressures on the coast can change quickly, and coastal areas in which development is rare may quickly become "gold rush" locations as prices in more desirable locations skyrocket. Regular and high quality monitoring of the outcomes on the coast will enable the effectiveness of the current management approaches to be critically assessed and changes to be made in a timely manner. Continuous monitoring is necessary to detect changes within the coastal environment before they become unmanageable.

Reporting monitoring information to the public, on a regular basis, enables community members to become informed about what is happening to their coasts and the extent to which it conforms to their agreed vision. Following are some of the areas which can be monitored to provide an indication of how effective coastal management is:

- Development trends – identifying the number and distribution of land use, subdivision and building consents granted in the coastal environment
- Trends in development consolidation - by an analysis of the existing land use and development pattern together with the development trends in the coastal environment
- Capacity of infrastructure services – by comparing the existing settlement and development pattern together with development trends and asset management plans service provision (existing and future)
- Extent and distribution of esplanade reserves and strips, access strips, other reserves and boat ramps providing public access to the coast
- Qualitative information on protection and enhancement of natural, historical and cultural values of the coastal environment – using field surveys and consultation

Tutukākā, Whangarei District

BEST PRACTICE ELEMENT CHECKLIST

The following provides a checklist summary of the key best practice elements that should be incorporated into planning documents in order to achieve positive outcomes for the coastal environment and the wider community. Each of these elements is discussed and explained in further detail in specific chapters and examples are provided to help demonstrate the value of including such features.

Best practice element
Define the landward extent of the coastal environment
Identify and protect areas with outstanding and high natural character
Identify and protect areas with outstanding natural landscape and high amenity value
Identify and protect areas that are significant natural ecosystems or sites of biological importance
Identify and protect threatened terrestrial, freshwater and marine species
Identify areas where particular activities are inappropriate, and are to be excluded, and areas where they are to be provided for
Control development in highly modified areas to protect remaining natural character
Control the location and design of buildings to reduce negative effects
Promote restoration activities
Undertake catchment-based assessments of sedimentation and contaminants and control activities which contribute to the problem
Control generation and disposal of stormwater and sewage
Assess and map coastal hazards and provide climate change standards for development
Only permit hard protection works to protect infrastructure of national or regional importance
Map existing and desired future public access to and along the coast
Require provision of full-width esplanade reserve or strips on subdivision except in exceptional circumstances
Identify and protect surf breaks
Identify and protect sites of significance to Māori and other important elements of the Māori relationship with the coast
Identify and protect areas with important historic values and provide for the protection of unidentified historic sites
Adopt integrated and strategic planning for urban waterfront development

Ōpito Bay, Thames-Coromandel District

CASE STUDY – STATUTORY PLANNING Draft Auckland Unitary Plan

The Unitary Plan, once adopted, will be Auckland's planning "rulebook", setting out where and how the city grows in the future. The Unitary Plan will replace the former regional policy statement and regional and district plans with one document which is focused on delivering the vision set out in the non-RMA Auckland Plan. It is intended to provide a simpler, more consistent set of rules that apply Auckland-wide.[12]

The draft Unitary Plan provides an excellent example of a clear strategic direction feeding into clear rules, such as prohibited activity status for inappropriate activities. The following provides provisions from part of the draft plan which apply to the coast.

Part 3 Regional and district objectives and policies 3.2 Zone objectives and policies 3.2.6 Rural zones 3.2.6.4 Rural Coastal zone

Policies

8. Maintain the rural coastal character and high amenity values by controlling the number, location, size and visual impact of dwellings and other non-residential buildings and their curtilage and accessways.
9. Manage the individual and cumulative adverse effects of buildings and other significant structures to maintain high-quality natural landscapes, high levels of amenity and local rural coastal character by:
   a. requiring buildings and other significant structures to be of a scale, location, design and density that integrates them into the rural coastal landscape
   b. avoiding locating buildings, other than those for farm utility purposes, on the top of ridgelines so that their profile does not protrude above the natural line of the ridge
   c. making building platforms and accessways the minimum size necessary to safely perform their function, and that earthworks required to establish these facilities are re-vegetated as soon as possible to cover bare soil exposure, particular on side batten surfaces
   d. not locating buildings and other significant structures in coastal yards and riparian margins, except for fences and structures with a functional need for such a location.

3.2.6.4.1 Pakiri coastal area

Objectives

1. Low levels of built development in the Pakiri coastal area are maintained to retain its coastal character and the scenic and recreational values of Pakiri Beach.

Policies

1. Avoid beachfront residential and rural lifestyle development in the Pakiri coastal area to retain the undeveloped character of Pakiri Beach.
2. Maintain existing public roads and other access ways to Pakiri Beach, but manage the type and intensity of development along these roads to protect their low-key development character.
3. Require buildings to locate outside the active dune system to protect the physical and ecological values of the dune system itself and to ensure its long-term stability.
4. Manage built development on existing rural titles and from title boundary realignments so that the size, location and density of buildings does not dominate over natural elements and the area retains a rural character rather than one of rural lifestyle domestication.
5. Minimise the visual and landscape impacts of buildings, when implementing policy 3.2.6.4.1.4, in areas where there are important public views to and from Pakiri Beach and the rural backdrop, including:
   a. views to and from the beach at the Pakiri River mouth
   b. views to and along Pakiri Beach and the southern coastal hills from Pakiri Regional Park
   c. views to and from the beach at Te Arai Point.
6. Avoid activities and development that adversely affect the natural character, recreational use, and water quality of the catchment of the Cape Rodney to Okakari Point/Goat Island Marine Reserve, particularly on the coastal hills fronting the reserve.

Part 4 Rules 4.2 Auckland wide 4.2.4 Subdivision 1. Activity Table Activity table - 5 Rural zones

Any subdivision not listed in the table is a Prohibited Activity

At the time of writing the draft Auckland Unitary Plan was available for informal public feedback, with notification and formal consultation planned later in 2013.

Pakiri Estuary, Auckland

CASE STUDY – NON-STATUTORY PLANNING Coromandel Peninsula Blueprint

For some years, communities on the Coromandel Peninsula have expressed concern about the impacts of development on their coastline and natural landscapes. In response, in 2006 the Thames-Coromandel District Council and Environment Waikato decided to prepare a non-statutory planning document, which would set out the community's vision for the area and provide a foundation for consistent planning and sound decisions going forward.[13]

A political steering group with representatives from the Thames-Coromandel District Council, Environment Waikato, Department of Conservation and Hauraki Whaanui drove the development of the Blueprint, drawing on existing plans and the substantial amount of information already collected on the Coromandel Peninsula's communities, environment and economy.

Growth projections indicate that demand for living opportunities on the Coromandel Peninsula will result in a further 15,000 houses being built by 2041.[14] This growth, together with the popularity of the area as a tourist destination, will continue to place a high demand on services and infrastructure.

The key focus of the Coromandel Peninsula Blueprint is on:

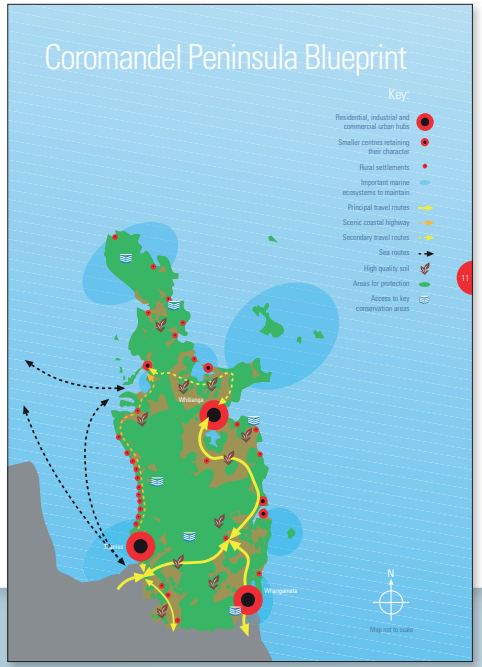
- Concentrating development and focusing future services and infrastructure within three main urban hubs
- Maintaining services and preserving the character of smaller centres and rural settlements
- Improving the integrated management of catchments
- Providing more control over rural and coastal subdivision
- Protecting and enhancing biodiversity and landscape values
- Fostering additional economic activity to provide more work opportunities within the district
- Managing development and avoiding new development in hazard prone areas

The preparation of the strategy was informed by a range of technical papers including those on demographics, open space and the built environment.

Implementation of the Blueprint is occuring at two distinct levels. The first is the district-wide level with strategies being developed to help achieve the four long term outcomes identified. The Blueprint will lead to changes in the district plan, regional policy statement, conservation management strategy and iwi management plans. The second key implementation tool at the local level will be Local Area Blueprint plans.

These plans will provide further details and direction on managing growth and development at a local (catchment, settlement and harbour) scale consistent with the Blueprint outcomes.[15]

In addition, regular monitoring will be needed to ensure that the Blueprint is adaptable if circumstances change significantly. Guidelines for monitoring and review, within a regular reporting framework, are being developed based on a set of indicators to measure the desired outcomes. The reviews will inform future policy changes and identify new actions which will help to achieve the document's goals.



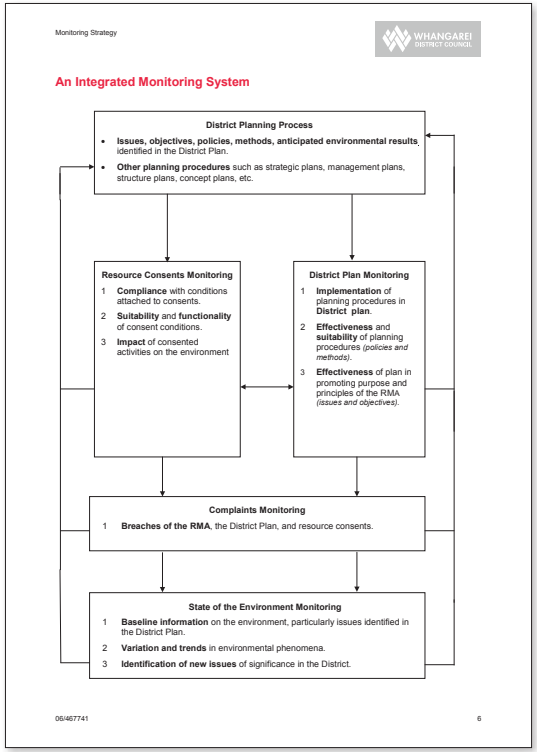
CASE STUDY – MONITORING Whangarei District Monitoring Strategy

The Whangarei District Monitoring Strategy is intended to provide a framework for the development of an integrated environmental monitoring programme over time. As well as providing an overarching framework, the Strategy also contains monitoring procedures, and acts as an operational guide for monitoring staff. This is to ensure that they adopt a consistent approach to monitoring activities and to reporting on monitoring outcomes.[15]

Local authorities have specific duties to monitor under the RMA and these include monitoring resource consents, the efficiency and effectiveness of planning documents and the state of the environment.

The Council has identified a number of matters which require monitoring, including subdivision and development, riparian and coastal margins, amenity values, tangata whenua values, indigenous vegetation and habitat, and open space. For each issue a number of Anticipated Environmental Results (AER) have been formulated based on the objectives, policies and methods in the Whangarei District Plan. Using these AERs, a range of information needs along with potential indicators, have been identified. For example, one of the AERs for subdivision and development is: "A pattern of consolidated land use and development that allows for the efficient use and development of natural and physical resources, avoids sporadic subdivision and ribbon development, particularly along the coast, and ensures a density of development appropriate to the location".

A useful report for identifying a range of appropriate monitoring approaches is the Whangarei Harbour Water Quality Action Plan Summary Document (November 2012) prepared by the Northland Regional Council and Whangarei District Council available at www.nrc.govt.nz.



Monitoring Strategy

WHANGAREI DISTRICT COUNCIL

An Integrated Monitoring System

District Planning Process

- **Issues, objectives, policies, methods, anticipated environmental results**, identified in the District Plan.
- **Other planning procedures** such as strategic plans, management plans, structure plans, concept plans, etc.

Resource Consents Monitoring

1 **Compliance** with conditions attached to consents.
2 **Suitability** and **functionality** of consent conditions.
3 **Impact** of consented activities on the environment

District Plan Monitoring

1 **Implementation** of planning procedures in **District plan**.
2 **Effectiveness** and **suitability** of planning procedures *(policies and methods)*.
3 **Effectiveness** of plan in promoting purpose and principles of the RMA *(issues and objectives)*.

Complaints Monitoring

1 **Breaches of the RMA**, the District Plan, and resource consents.

State of the Environment Monitoring

1 **Baseline information** on the environment, particularly issues identified in the District Plan.
2 **Variation and trends** in environmental phenomena.
3 **Identification of new issues** of significance in the District.

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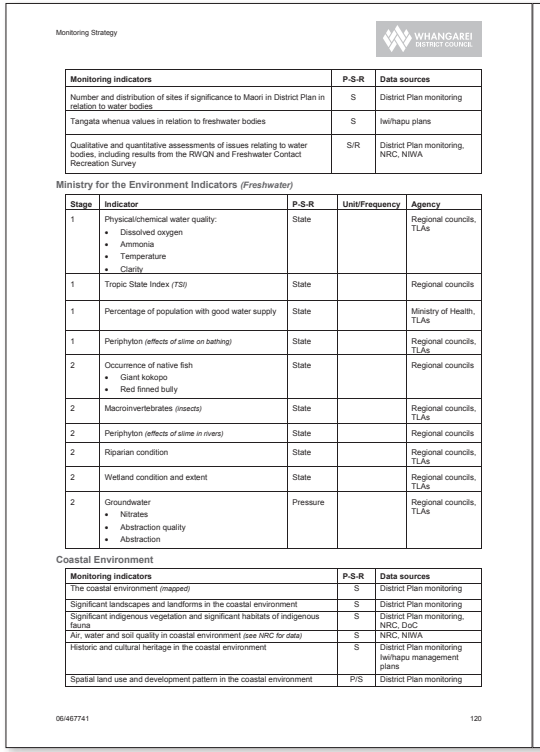

Monitoring Strategy

WHANGAREI DISTRICT COUNCIL

Monitoring indicators	P-S-R	Data sources
Number and distribution of sites if significance to Maori in District Plan in relation to water bodies	S	District Plan monitoring
Tangata whenua values in relation to freshwater bodies	S	Iwi/hapu plans
Qualitative and quantitative assessments of issues relating to water bodies, including results from the RWQN and Freshwater Contact Recreation Survey	S/R	District Plan monitoring, NRC, NIWA

Ministry for the Environment Indicators *(Freshwater)*

Stage	Indicator	P-S-R	Unit/Frequency	Agency
1	Physical/chemical water quality: • Dissolved oxygen • Ammonia • Temperature • Clarity	State		Regional councils, TLAs
1	Tropic State Index *(TSI)*	State		Regional councils
1	Percentage of population with good water supply	State		Ministry of Health, TLAs
1	Periphyton *(effects of slime on bathing)*	State		Regional councils, TLAs
2	Occurrence of native fish • Giant kokopo • Red finned bully	State		Regional councils
2	Macroinvertebrates *(insects)*	State		Regional councils, TLAs
2	Periphyton *(effects of slime in rivers)*	State		Regional councils
2	Riparian condition	State		Regional councils, TLAs
2	Wetland condition and extent	State		Regional councils, TLAs
2	Groundwater • Nitrates • Abstraction quality • Abstraction	Pressure		Regional councils, TLAs

Coastal Environment

Monitoring indicators	P-S-R	Data sources
The coastal environment *(mapped)*	S	District Plan monitoring
Significant landscapes and landforms in the coastal environment	S	District Plan monitoring
Significant indigenous vegetation and significant habitats of indigenous fauna	S	District Plan monitoring, NRC, DoC
Air, water and soil quality in coastal environment *(see NRC for data)*	S	NRC, NIWA
Historic and cultural heritage in the coastal environment	S	District Plan monitoring Iwi/hapu management plans
Spatial land use and development pattern in the coastal environment	P/S	District Plan monitoring

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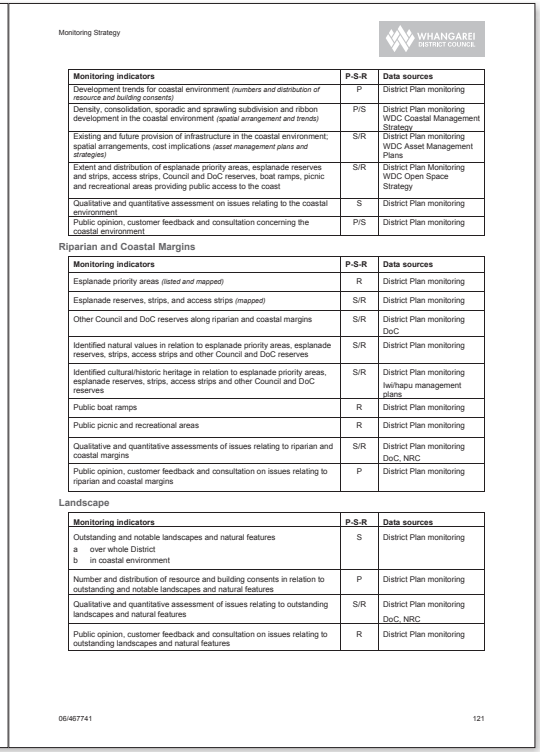

Monitoring Strategy

WHANGAREI DISTRICT COUNCIL

Monitoring indicators	P-S-R	Data sources
Development trends for coastal environment *(numbers and distribution of resource and building consents)*	P	District Plan monitoring
Density, consolidation, sporadic and sprawling subdivision and ribbon development in the coastal environment *(spatial arrangement and trends)*	P/S	District Plan monitoring WDC Coastal Management Strategy
Existing and future provision of infrastructure in the coastal environment; spatial arrangements, cost implications *(asset management plans and strategies)*	S/R	District Plan monitoring WDC Asset Management Plans
Extent and distribution of esplanade priority areas, esplanade reserves and strips, access strips, Council and DoC reserves, boat ramps, picnic and recreational areas providing public access to the coast	S/R	District Plan Monitoring WDC Open Space Strategy
Qualitative and quantitative assessment on issues relating to the coastal environment	S	District Plan monitoring
Public opinion, customer feedback and consultation concerning the coastal environment	P/S	District Plan monitoring

Riparian and Coastal Margins

Monitoring indicators	P-S-R	Data sources
Esplanade priority areas *(listed and mapped)*	R	District Plan monitoring
Esplanade reserves, strips, and access strips *(mapped)*	S/R	District Plan monitoring
Other Council and DoC reserves along riparian and coastal margins	S/R	District Plan monitoring DoC
Identified natural values in relation to esplanade priority areas, esplanade reserves, strips, access strips and other Council and DoC reserves	S/R	District Plan monitoring
Identified cultural/historic heritage in relation to esplanade priority areas, esplanade reserves, strips, access strips and other Council and DoC reserves	S/R	District Plan monitoring Iwi/hapu management plans
Public boat ramps	R	District Plan monitoring
Public picnic and recreational areas	R	District Plan monitoring
Qualitative and quantitative assessments of issues relating to riparian and coastal margins	S/R	District Plan monitoring DoC, NRC
Public opinion, customer feedback and consultation on issues relating to riparian and coastal margins	P	District Plan monitoring

Landscape

Monitoring indicators	P-S-R	Data sources
Outstanding and notable landscapes and natural features a over whole District b in coastal environment	S	District Plan monitoring
Number and distribution of resource and building consents in relation to outstanding and notable landscapes and natural features	P	District Plan monitoring
Qualitative and quantitative assessment of issues relating to outstanding landscapes and natural features	S/R	District Plan monitoring DoC, NRC
Public opinion, customer feedback and consultation on issues relating to outstanding landscapes and natural features	R	District Plan monitoring

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CASE STUDY – SPATIAL PLANNING South East Queensland Regional Plan, Australia

This plan focuses on growth and urban development within the region over a 20 year period until 2031. Its purpose is to manage regional growth and change in the most sustainable way to protect and enhance quality of life of the region which comprises 11 regional and city councils, many of which border the coast.

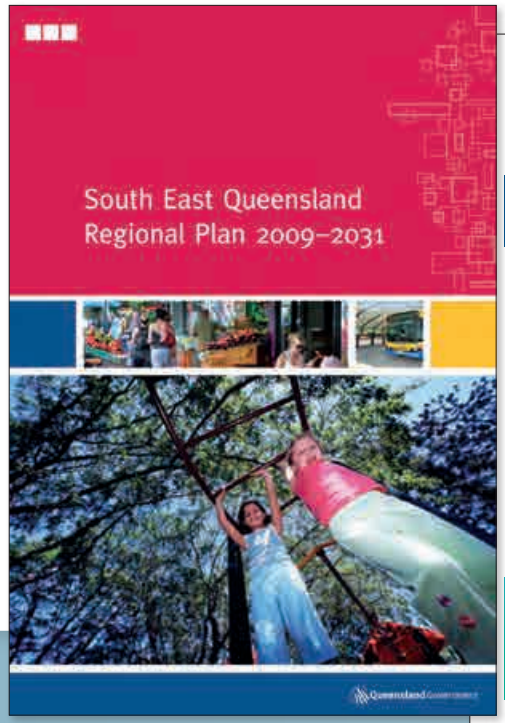
The South East Queensland Regional Plan sits within the Queensland land use planning framework and reflects and informs state planning policy and priorities. It also guides local government policies and plans and non-statutory processes, such as planning for natural resource management, urban renewal and new growth areas at the district and neighbourhood levels.

The regional vision for South East Queensland as set out by the Regional Plan is a future that is sustainable, affordable, prosperous, liveable and resilient to climate change, where:

- communities are safe, healthy, accessible and inclusive
- there are diverse employment opportunities and quality infrastructure and services, including education and health
- urban and rural areas are mutually supportive and collaborative in creating wealth for the community
- development is sustainable and well designed, and the subtropical character of the region is recognised and reinforced
- ecological and culturally significant landscapes are valued, celebrated, protected and enhanced
- the community has access to a range of quality open space and recreational opportunities

The plan identifies an urban footprint to provide for current and future urban development. It also seeks to protect 80 per cent of Queensland from urban development through identifying Regional Landscape and Rural Production Areas where urban development is prohibited.

All councils within the region are required to develop local growth management strategies and to demonstrate how they will achieve the goals set out in the regional plan. The plan has been accompanied by a South East Queensland Infrastructure Plan which is updated annually and linked with the State Government budget.[18]




Part B–Regional policies 47

2. Natural environment

Desired regional outcome 2

A healthy and resilient natural environment is protected, maintained and restored to sustainably support the region's rich biodiversity and ecosystem services including clean air and water, outdoor lifestyles and other community needs that critically underpin economic and social development.

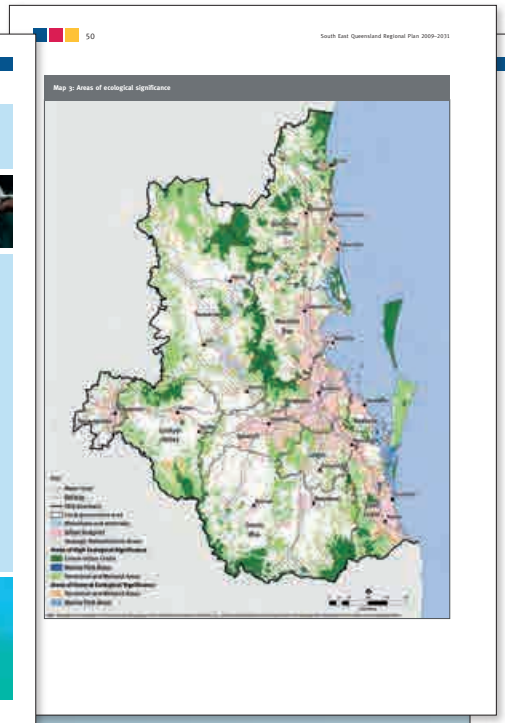
SEQ is one of Australia's identified 'biodiversity hotspots' and is renowned for the quality and diversity of its natural environment, which includes some distinctive features:

- rich and diverse native flora and fauna
- the largest urban koala population in Australia
- a dynamic coastline and marine waters that comprise
  - coastal wetlands, including Pumicestone Passage and Carbrook
  - unique sand islands, including Moreton, Stradbroke and Bribie islands
  - internationally recognised dugong, turtle and wader bird habitats in Moreton Bay
  - open coastline including rocky foreshores, reefs, headlands and surf beaches
- spectacular forested mountain ranges and peaks, including
  - the Gondwana Rainforests of Australia World Heritage area including expansive rainforest reserves in Lamington, Springbrook, Mount Barney and Main Range national parks
  - D'Aguilar Range, Blackall Ranges, Tamborine Mountain and the Glass House Mountains
- freshwater wetlands, waterways and floodplains, including the Noosa River and the extensive waterways of the Brisbane, Logan and Lockyer valleys
- generally good air and water quality.

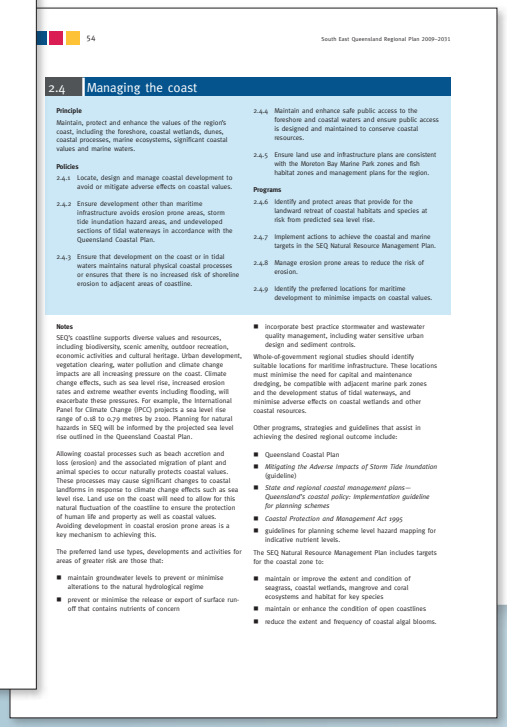
SEQ's population growth and related urban and rural development are increasing the pressure on the natural environment. SEQ was a vastly different place before European settlement in 1824. Although shaped by human occupants for tens of thousands of years prior to that time, the region's lands, waters, atmosphere and biodiversity were managed in a sustainable way. Continued clearing and fragmentation of natural areas and further degradation of natural environmental processes will adversely affect the region's biodiversity, resilience to climate change, air and water quality, agriculture, economic potential and public health. Unless prevented, managed or reversed, these factors will continue to threaten regional sustainability. Protecting and managing the natural environment is fundamental to achieving a sustainable future for the region.

The Queensland Government has committed to protecting 50 per cent more land for nature conservation statewide by 2020 in *Toward Q2: Tomorrow's Queensland.*

A coordinated and collaborative approach by government, industry and the community, with full engagement of traditional owners, has been enhanced by the establishment of the Chief Executive Officers Committee for Natural Resource Management in South East Queensland and a new state agency designed to better coordinate environment and resource management across the state. Community engagement is essential to protect and strategically restore the region's natural environmental values in order to build resilience, especially as climatic conditions become more varied and extreme. Strategic investment in new habitat areas and a viable network of connecting corridors will be required to enable flora and fauna to move and adapt to changing conditions over time.


50 South East Queensland Regional Plan 2009–2031

Map 3: Areas of ecological significance


54 South East Queensland Regional Plan 2009–2031

2.4 Managing the coast

Principle

Maintain, protect and enhance the values of the region's coast, including the foreshore, coastal wetlands, dunes, coastal processes, marine ecosystems, significant coastal values and marine waters.

Policies

2.4.1 Locate, design and manage coastal development to avoid or mitigate adverse effects on coastal values.

2.4.2 Ensure development other than maritime infrastructure avoids erosion prone areas, storm tide inundation hazard areas, and undeveloped sections of tidal waterways in accordance with the Queensland Coastal Plan.

2.4.3 Ensure that development on the coast or in tidal waters maintains natural physical coastal processes or ensures that there is no increased risk of shoreline erosion to adjacent areas of coastline.

2.4.4 Maintain and enhance safe public access to the foreshore and coastal waters and ensure public access is designed and maintained to conserve coastal resources.

2.4.5 Ensure land use and infrastructure plans are consistent with the Moreton Bay Marine Park zones and fish habitat zones and management plans for the region.

Programs

2.4.6 Identify and protect areas that provide for the landward retreat of coastal habitats and species at risk from predicted sea level rise.

2.4.7 Implement actions to achieve the coastal and marine targets in the SEQ Natural Resource Management Plan.

2.4.8 Manage erosion prone areas to reduce the risk of erosion.

2.4.9 Identify the preferred locations for maritime development to minimise impacts on coastal values.

Notes

SEQ's coastline supports diverse values and resources, including biodiversity, scenic amenity, outdoor recreation, economic activities and cultural heritage. Urban development, vegetation clearing, water pollution and climate change impacts are all increasing pressure on the coast. Climate change effects, such as sea level rise, increased erosion rates and extreme weather events including flooding, will exacerbate these pressures. For example, the International Panel for Climate Change (IPCC) projects a sea level rise range of 0.18 to 0.79 metres by 2100. Planning for natural hazards in SEQ will be informed by the projected sea level rise outlined in the Queensland Coastal Plan.

Allowing coastal processes such as beach accretion and loss (erosion) and the associated migration of plant and animal species to occur naturally protects coastal values. These processes may cause significant changes to coastal landforms in response to climate change effects such as sea level rise. Land use on the coast will need to allow for this natural fluctuation of the coastline to ensure the protection of human life and property as well as coastal values. Avoiding development in coastal erosion prone areas is a key mechanism to achieving this.

The preferred land use types, developments and activities for areas of greater risk are those that:

- maintain groundwater levels to prevent or minimise alterations to the natural hydrological regime
- prevent or minimise the release or export of surface run-off that contains nutrients of concern
- incorporate best practice stormwater and wastewater quality management, including water sensitive urban design and sediment controls.

Whole-of-government regional studies should identify suitable locations for maritime infrastructure. These locations must minimise the need for capital and maintenance dredging, be compatible with adjacent marine park zones and the development status of tidal waterways, and minimise adverse effects on coastal wetlands and other coastal resources.

Other programs, strategies and guidelines that assist in achieving the desired regional outcome include:

- Queensland Coastal Plan
- *Mitigating the Adverse Impacts of Storm Tide Inundation* (guideline)
- *State and regional coastal management plans—Queensland's coastal policy: implementation guideline for planning schemes*
- *Coastal Protection and Management Act 1995*
- guidelines for planning scheme level hazard mapping for indicative nutrient levels.

The SEQ Natural Resource Management Plan includes targets for the coastal zone to:

- maintain or improve the extent and condition of seagrass, coastal wetlands, mangrove and coral ecosystems and habitat for key species
- maintain or enhance the condition of open coastlines
- reduce the extent and frequency of coastal algal blooms.

REFERENCES AND FURTHER READING

Board of Inquiry, 2009, *Proposed New Zealand coastal policy statement (2008)*, Board of Inquiry report and recommendations, Volume 1: Findings, recommendations and recommended NZCPS (2009), Wellington

NZCPS 2010 Implementation Steering Group, 2011, *New Zealand Coastal Policy Statement 2010 national implementation plan*, Department of Conservation, Wellington

Peart R, 2005, *The community guide to coastal development under the Resource Management Act 1991*, Environmental Defence Society, Auckland

Peart R and P Reaburn, 2011, *Strengthening second generation regional policy statements*, Environmental Defence Society, Auckland

FOOTNOTES

1 Policy 13(1)(d)
2 Policy 15(d)
3 Policy 7(2)
4 Policy 7(1)(b)
5 Policy 7(1)(a)
6 Policy 8(a)
7 Policy 9(b)
8 Policy 14(b)
9 Policy 21(a)
10 Policy 24(1)
11 section 104(1)(c)
12 http://unitaryplan.aucklandcouncil.govt.nz/pages/xc.enquire/default.aspx
13 http://www.corobluepprint.govt.nz/uploads/69933/files/FINAL_CPB_Summary_Bro_2010.pdf
14 http://www.corobluepprint.govt.nz/uploads/69933/files/FINAL_CPB_Summary_Bro_2010.pdf
15 http://www.corobluepprint.govt.nz/uploads/69933/files/FINAL_CPB_Summary_Bro_2010.pdf
16 http://www.wdc.govt.nz/PlansPoliciesandBylaws/Plans/State-of-the-Environment/Documents/Monitoring-Strategy.pdf
17 http://www.wdc.govt.nz/PlansPoliciesandBylaws/Plans/State-of-the-Environment/Documents/Monitoring-Strategy.pdf
18 http://www.dsdip.qld.gov.au/resources/plan/seq/regional-plan-2009/seq-regional-plan-2009.pdf

Glinks Gully, Kaipara District

Riverton Beach, Southland

Ocean Beach, Hastings District

CONCLUSIONS

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New Zealand is in the very fortunate position of enjoying a spectacular coastline, which supports a diverse range of habitats and species, and which is different to that found anywhere else in the world. The coast is extraordinarily important in terms of New Zealand's heritage, quality of life and economic welfare.

With the growing pressures and threats facing this country's coastal environment, we are at risk of losing many significant values which are of much environmental, social, cultural and economic importance. In the years since EDS first published its community guide to the management of coastal development in 2005, coastal managers have been facing increasing challenges.

Major urban centres, most of which are located on the coast, continue to expand as the national population becomes increasingly focused in coastal settlements. At the same time, the public's desire to access and recreate on the coast, and to experience undeveloped, wild coastline as an escape from urban living, is also increasing.

Climate change will place much greater stress on our coastal management system, as sea-level rise and coastal erosion affects property and infrastructure. It will also place increased pressure on remaining coastal habitats, including estuaries, dunes and wetlands.

This guide has set out how these challenges can be better addressed through the proactive implementation of the strengthened provisions of the New Zealand Coastal Policy Statement 2010. It will require the commitment of coastal managers, developers, community groups and individuals to ensure that this happens.

Martins Bay, Fiordland

APPENDICES

Whangamumu Harbour, Far North District

APPENDIX ONE – NEW ZEALAND COASTAL POLICY STATEMENT 2010

This New Zealand Coastal Policy Statement was issued by notice in the New Zealand Gazette on 4 November 2010 and takes effect on 3 December 2010.

Preamble

The New Zealand Coastal Policy Statement (NZCPS) is a national policy statement under the Resource Management Act 1991 ("the Act"). The purpose of the NZCPS is to state policies in order to achieve the purpose of the Act in relation to the coastal environment of New Zealand.

The coastal environment has characteristics, qualities and uses that mean there are particular challenges in promoting sustainable management:

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

The coastal environment is facing the following key issues:

- the ability to manage activities in the coastal environment is hindered by a lack of understanding about some coastal processes and the effects of activities on them;
- loss of natural character, landscape values and wild or scenic areas along extensive areas of the coast, particularly in areas closer to population centres or accessible for rural residential development;
- continuing decline in species, habitats and ecosystems in the coastal environment under pressures from subdivision and use, vegetation clearance, loss of intertidal areas, plant and animal pests, poor water quality, and sedimentation in estuaries and the coastal marine area;
- demand for coastal sites for infrastructure uses (including energy generation) and for aquaculture to meet the economic, social and cultural needs of people and communities;
- poor and declining coastal water quality in many areas as a consequence of point and diffuse sources of contamination, including stormwater and wastewater discharges;
- adverse effects of poor water quality on aquatic life and opportunities for aquaculture, mahinga kai gathering and recreational uses such as swimming and kayaking;
- loss of natural, built and cultural heritage from subdivision, use, and development;
- compromising of the open space and recreational values of the coastal environment, including the potential for permanent and physically accessible walking public access to and along the coastal marine area;
- continuing coastal erosion and other natural hazards that will be exacerbated by climate change and which will increasingly threaten existing infrastructure, public access and other coastal values as well as private property; and
- the use of vehicles on beaches causing ecological damage and creating conflicts with other recreational uses and values of the coastal environment.

For the coastal environment of the Hauraki Gulf, the Hauraki Gulf Marine Park Act 2000 requires that sections 7 and 8 of that Act must be treated as a New Zealand coastal policy statement issued under the Act. Section 10(2) of the Hauraki Gulf Marine Park Act 2000 states that if there is a conflict between sections 7 and 8 and the provisions of the NZCPS, the NZCPS prevails.

Application of this policy statement

This NZCPS is to be applied as required by the Act by persons exercising functions and powers under the Act. The Act itself should be consulted, but at the time of gazettal of this statement, its requirements in relation to this NZCPS are, in summary, that:

- regional policy statements, regional plans and district plans must give effect to this NZCPS (sections 62(3), 67(3)(b), 75(3)(b) refer);
- local authorities must amend regional policy statements, proposed regional policy statements, plans, proposed plans, and variations to give effect to NZCPS provisions that affect these documents as soon as practicable, using the process set out in Schedule 1 of the Act except where this NZCPS directs otherwise (section 55 refers);
- a consent authority, when considering an application for a resource consent and any submissions received, must, subject to Part 2 of the Act, have regard to, amongst other things, any relevant provisions of this NZCPS (section 104(1)(b)(iv) refers);
- when considering a requirement for a designation and any submissions received, a territorial authority must, subject to Part 2 of the Act, consider the effects on the environment of allowing the requirement, having particular regard to, amongst other things, any relevant provisions of this NZCPS (sections 168A(3)(a)(ii) and 171(1)(a)(ii) refer);
- when considering a requirement for a heritage order, a territorial authority must, subject to Part 2 of the Act, in addition to having regard to certain matters, have particular regard to, amongst other things, all relevant provisions of this NZCPS (section 191(1)(d) refers);
- in considering an application for a water conservation order, a special tribunal, in addition to having particular regard to certain matters, must have regard to, amongst other things, the relevant provisions of this NZCPS (section 207(c) refers);
- in conducting an inquiry in respect of the report of a special tribunal on an application for a water conservation order, the Environment Court, in addition to having particular regard to certain matters, must have regard to, amongst other things, the relevant provisions of this NZCPS (section 212(b) refers).

Interpretation

In this NZCPS:

- numbering of objectives and policies is solely for convenience and is not to be interpreted as an indication of relative importance; and
- section and policy headings indicate general subject matter and are relevant to the interpretation of objectives and policies.

Where bullet points in an objective or clauses in a policy take the form of a list:

- where the list is cumulative, the word 'and' is used before the last clause in the list; and
- where clauses are alternative, the word 'or' is used between all clauses.

Definitions contained in the Act are not repeated in the Glossary.

Objectives

Objective 1
To safeguard the integrity, form, functioning and resilience of the coastal environment and sustain its ecosystems, including marine and intertidal areas, estuaries, dunes and land, by:

- maintaining or enhancing natural biological and physical processes in the coastal environment and recognising their dynamic, complex and interdependent nature;
- protecting representative or significant natural ecosystems and sites of biological importance and maintaining the diversity of New Zealand's indigenous coastal flora and fauna; and
- maintaining coastal water quality, and enhancing it where it has deteriorated from what would otherwise be its natural condition, with significant adverse effects on ecology and habitat, because of discharges associated with human activity.

Objective 2
To preserve the natural character of the coastal environment and protect natural features and landscape values through:

- recognising the characteristics and qualities that contribute to natural character, natural features and landscape values and their location and distribution;
- identifying those areas where various forms of subdivision, use, and development would be inappropriate and protecting them from such activities; and
- encouraging restoration of the coastal environment.

Objective 3
To take account of the principles of the Treaty of Waitangi, recognise the role of tangata whenua as kaitiaki and provide for tangata whenua involvement in management of the coastal environment by:

- recognising the ongoing and enduring relationship of tangata whenua over their lands, rohe and resources;
- promoting meaningful relationships and interactions between tangata whenua and persons exercising functions and powers under the Act;
- incorporating mātauranga Māori into sustainable management practices; and
- recognising and protecting characteristics of the coastal environment that are of special value to tangata whenua.

Objective 4
To maintain and enhance the public open space qualities and recreation opportunities of the coastal environment by:

- recognising that the coastal marine area is an extensive area of public space for the public to use and enjoy;
- maintaining and enhancing public walking access to and along the coastal marine area without charge, and where there are exceptional reasons that mean this is not practicable providing alternative linking access close to the coastal marine area; and
- recognising the potential for coastal processes, including those likely to be affected by climate change, to restrict access to the coastal environment and the need to ensure that public access is maintained even when the coastal marine area advances inland.

Objective 5
To ensure that coastal hazard risks taking account of climate change, are managed by:

- locating new development away from areas prone to such risks;
- considering responses, including managed retreat, for existing development in this situation; and
- protecting or restoring natural defences to coastal hazards.

Objective 6
To enable people and communities to provide for their social, economic, and cultural wellbeing and their health and safety, through subdivision, use, and development, recognising that:

- the protection of the values of the coastal environment does not preclude use and development in appropriate places and forms, and within appropriate limits;
- some uses and developments which depend upon the use of natural and physical resources in the coastal environment are important to the social, economic and cultural wellbeing of people and communities;
- functionally some uses and developments can only be located on the coast or in the coastal marine area;

- the coastal environment contains renewable energy resources of significant value;
- the protection of habitats of living marine resources contributes to the social, economic and cultural wellbeing of people and communities;
- the potential to protect, use, and develop natural and physical resources in the coastal marine area should not be compromised by activities on land;
- the proportion of the coastal marine area under any formal protection is small and therefore management under the Act is an important means by which the natural resources of the coastal marine area can be protected; and
- historic heritage in the coastal environment is extensive but not fully known, and vulnerable to loss or damage from inappropriate subdivision, use, and development.

Objective 7
To ensure that management of the coastal environment recognises and provides for New Zealand's international obligations regarding the coastal environment, including the coastal marine area.

Policies

Policy 1 Extent and characteristics of the coastal environment

(1) Recognise that the extent and characteristics of the coastal environment vary from region to region and locality to locality; and the issues that arise may have different effects in different localities.

(2) Recognise that the coastal environment includes:

(a) the coastal marine area;

(b) islands within the coastal marine area;

(c) areas where coastal processes, influences or qualities are significant, including coastal lakes, lagoons, tidal estuaries, saltmarshes, coastal wetlands, and the margins of these;

(d) areas at risk from coastal hazards;

(e) coastal vegetation and the habitat of indigenous coastal species including migratory birds;

(f) elements and features that contribute to the natural character, landscape, visual qualities or amenity values;

(g) items of cultural and historic heritage in the coastal marine area or on the coast;

(h) inter-related coastal marine and terrestrial systems, including the intertidal zone; and

(i) physical resources and built facilities, including infrastructure, that have modified the coastal environment.

Policy 2 The Treaty of Waitangi, tangata whenua and Māori heritage

In taking account of the principles of the Treaty of Waitangi (Te Tiriti o Waitangi), and kaitiakitanga, in relation to the coastal environment:

(a) recognise that tangata whenua have traditional and continuing cultural relationships with areas of the coastal environment, including places where they have lived and fished for generations;

(b) involve iwi authorities or hapū on behalf of tangata whenua in the preparation of regional policy statements, and plans, by undertaking effective consultation with tangata whenua; with such consultation to be

early, meaningful, and as far as practicable in accordance with tikanga Māori;

(c) with the consent of tangata whenua and as far as practicable in accordance with tikanga Māori, incorporate mātauranga Māori[1] in regional policy statements, in plans, and in the consideration of applications for resource consents, notices of requirement for designation and private plan changes;

(d) provide opportunities in appropriate circumstances for Māori involvement in decision making, for example when a consent application or notice of requirement is dealing with cultural localities or issues of cultural significance, and Māori experts, including pūkenga[2], may have knowledge not otherwise available;

(e) take into account any relevant iwi resource management plan and any other relevant planning document recognised by the appropriate iwi authority or hapū and lodged with the council, to the extent that its content has a bearing on resource management issues in the region or district; and

  (i) where appropriate incorporate references to, or material from, iwi resource management plans in regional policy statements and in plans; and

  (ii) consider providing practical assistance to iwi or hapū who have indicated a wish to develop iwi resource management plans;

(f) provide for opportunities for tangata whenua to exercise kaitiakitanga over waters, forests, lands, and fisheries in the coastal environment through such measures as:

  (i) bringing cultural understanding to monitoring of natural resources;

  (ii) providing appropriate methods for the management, maintenance and protection of the taonga of tangata whenua;

  (iii) having regard to regulations, rules or bylaws relating to ensuring sustainability of fisheries resources such as taiāpure, mahinga mātaitai or other non commercial Māori customary fishing; and

(g) in consultation and collaboration with tangata whenua, working as far as practicable in accordance with tikanga Māori, and recognising that tangata whenua have the right to choose not to identify places or values of historic, cultural or spiritual significance or special value:

  (i) recognise the importance of Māori cultural and heritage values through such methods as historic heritage, landscape and cultural impact assessments; and

  (ii) provide for the identification, assessment, protection and management of areas or sites of significance or special value to Māori, including by historic analysis and archaeological survey and the development of methods such as alert layers and predictive methodologies for identifying areas of high potential for undiscovered Māori heritage, for example coastal pā or fishing villages.

Policy 3 Precautionary approach

(1) Adopt a precautionary approach towards proposed activities whose effects on the coastal environment are uncertain, unknown, or little understood, but potentially significantly adverse.

(2) In particular, adopt a precautionary approach to use and management of coastal resources potentially vulnerable to effects from climate change, so that:

  (a) avoidable social and economic loss and harm to communities does not occur;

  (b) natural adjustments for coastal processes, natural defences, ecosystems, habitat and species are allowed to occur; and

  (c) the natural character, public access, amenity and other values of the coastal environment meet the needs of future generations.

Policy 4 Integration

Provide for the integrated management of natural and physical resources in the coastal environment, and activities that affect the coastal environment. This requires:

(a) co-ordinated management or control of activities within the coastal environment, and which could cross administrative boundaries, particularly:

(i) the local authority boundary between the coastal marine area and land;

(ii) local authority boundaries within the coastal environment, both within the coastal marine area and on land; and

(iii) where hapū or iwi boundaries or rohe cross local authority boundaries;

(b) working collaboratively with other bodies and agencies with responsibilities and functions relevant to resource management, such as where land or waters are held or managed for conservation purposes; and

(c) particular consideration of situations where:

(i) subdivision, use, or development and its effects above or below the line of mean high water springs will require, or is likely to result in, associated use or development that crosses the line of mean high water springs; or

(ii) public use and enjoyment of public space in the coastal environment is affected, or is likely to be affected; or

(iii) development or land management practices may be affected by physical changes to the coastal environment or potential inundation from coastal hazards, including as a result of climate change; or

(iv) land use activities affect, or are likely to affect, water quality in the coastal environment and marine ecosystems through increasing sedimentation; or

(v) significant adverse cumulative effects are occurring, or can be anticipated.

Policy 5 Land or waters managed or held under other Acts

(1) Consider effects on land or waters in the coastal environment held or managed under:

(a) the Conservation Act 1987 and any Act listed in the 1st Schedule to that Act; or

(b) other Acts for conservation or protection purposes;

and, having regard to the purposes for which the land or waters are held or managed:

(c) avoid adverse effects of activities that are significant in relation to those purposes; and

(d) otherwise avoid, remedy or mitigate adverse effects of activities in relation to those purposes.

(2) Have regard to publicly notified proposals for statutory protection of land or waters in the coastal environment and the adverse effects of activities on the purposes of that proposed statutory protection.

Policy 6 Activities in the coastal environment

(1) In relation to the coastal environment:

(a) recognise that the provision of infrastructure, the supply and transport of energy including the generation and transmission of electricity, and the extraction of minerals are activities important to the social, economic and cultural well-being of people and communities;

(b) consider the rate at which built development and the associated public infrastructure should be enabled to provide for the reasonably foreseeable needs of population growth without compromising the other values of the coastal environment;

(c) encourage the consolidation of existing coastal settlements and urban areas where this will contribute to the avoidance or mitigation of sprawling or sporadic patterns of settlement and urban growth;

(d) recognise tangata whenua needs for papakāinga[3], marae and associated developments and make appropriate provision for them;

(e) consider where and how built development on land should be controlled so that it does not compromise activities of national or regional importance that have a functional need to locate and operate in the coastal marine area;

(f) consider where development that maintains the character of the existing built environment should be encouraged, and where development resulting in a change in character would be acceptable;

(g) take into account the potential of renewable resources in the coastal environment, such as energy from wind, waves, currents and tides, to meet the reasonably foreseeable needs of future generations;

(h) consider how adverse visual impacts of development can be avoided in areas sensitive to such effects, such as headlands and prominent ridgelines, and as far as practicable and reasonable apply controls or conditions to avoid those effects;

(i) set back development from the coastal marine area and other water bodies, where practicable and reasonable, to protect the natural character, open space, public access and amenity values of the coastal environment; and

(j) where appropriate, buffer areas and sites of significant indigenous biological diversity, or historic heritage value.

(2) Additionally, in relation to the coastal marine area:

(a) recognise potential contributions to the social, economic and cultural wellbeing of people and communities from use and development of the coastal marine area, including the potential for renewable marine energy to contribute to meeting the energy needs of future generations:

(b) recognise the need to maintain and enhance the public open space and recreation qualities and values of the coastal marine area;

(c) recognise that there are activities that have a functional need to be located in the coastal marine area, and provide for those activities in appropriate places;

(d) recognise that activities that do not have a functional need for location in the coastal marine area generally should not be located there; and

(e) promote the efficient use of occupied space, including by:

(i) requiring that structures be made available for public or multiple use wherever reasonable and practicable;

(ii) requiring the removal of any abandoned or redundant structure that has no heritage, amenity or reuse value; and

(iii) considering whether consent conditions should be applied to ensure that space occupied for an activity is used for that purpose effectively and without unreasonable delay.

Policy 7 Strategic planning

(1) In preparing regional policy statements, and plans:

(a) consider where, how and when to provide for future residential, rural residential, settlement, urban development and other activities in the coastal environment at a regional and district level, and:

(b) identify areas of the coastal environment where particular activities and forms of subdivision, use and development:

(i) are inappropriate; and

(ii) may be inappropriate without the consideration of effects through a resource consent application, notice of requirement for designation or Schedule 1 of the Act process;

and provide protection from inappropriate subdivision, use, and development in these areas through objectives, policies and rules.

(2) Identify in regional policy statements, and plans, coastal processes, resources or values that are under threat or at significant risk from adverse cumulative effects. Include provisions in plans to manage these effects. Where practicable, in plans, set thresholds (including zones, standards or targets), or specify acceptable limits to change, to assist in determining when activities causing adverse cumulative effects are to be avoided.

Policy 8 Aquaculture

Recognise the significant existing and potential contribution of aquaculture to the social, economic and cultural well-being of people and communities by:

(a) including in regional policy statements and regional coastal plans provision for aquaculture activities in appropriate places in the coastal environment, recognising that relevant considerations may include:

(i) the need for high water quality for aquaculture activities; and

(ii) the need for land-based facilities associated with marine farming;

(b) taking account of the social and economic benefits of aquaculture, including any available assessments of national and regional economic benefits; and

(c) ensuring that development in the coastal environment does not make water quality unfit for aquaculture activities in areas approved for that purpose.

Policy 9 Ports

Recognise that a sustainable national transport system requires an efficient national network of safe ports, servicing national and international shipping, with efficient connections with other transport modes, including by:

(a) ensuring that development in the coastal environment does not adversely affect the efficient and safe operation of these ports, or their connections with other transport modes; and

(b) considering where, how and when to provide in regional policy statements and in plans for the efficient and safe operation of these ports, the development of their capacity for shipping, and their connections with other transport modes.

Policy 10 Reclamation and de-reclamation

(1) Avoid reclamation of land in the coastal marine area, unless:

(a) land outside the coastal marine area is not available for the proposed activity;

(b) the activity which requires reclamation can only occur in or adjacent to the coastal marine area;

(c) there are no practicable alternative methods of providing the activity; and

(d) the reclamation will provide significant regional or national benefit.

(2) Where a reclamation is considered to be a suitable use of the coastal marine area, in considering its form and design have particular regard to:

(a) the potential effects on the site of climate change, including sea level rise, over no less than 100 years;

(b) the shape of the reclamation, and, where appropriate, whether the materials used are visually and aesthetically compatible with the adjoining coast;

(c) the use of materials in the reclamation, including avoiding the use of contaminated materials that could significantly adversely affect water quality, aquatic ecosystems and indigenous biodiversity in the coastal marine area;

(d) providing public access, including providing access to and along the coastal marine area at high tide where practicable, unless a restriction on public access is appropriate as provided for in policy 19;

(e) the ability to remedy or mitigate adverse effects on the coastal environment;

(f) whether the proposed activity will affect cultural landscapes and sites of significance to tangata whenua; and

(g) the ability to avoid consequential erosion and accretion, and other natural hazards.

(3) In considering proposed reclamations, have particular regard to the extent to which the reclamation and intended purpose would provide for the efficient operation of infrastructure, including ports, airports, coastal roads, pipelines, electricity transmission, railways and ferry terminals, and of marinas and electricity generation.

(4) De-reclamation of redundant reclaimed land is encouraged where it would:

(a) restore the natural character and resources of the coastal marine area; and

(b) provide for more public open space.

Policy 11 Indigenous biological diversity (biodiversity)

To protect indigenous biological diversity in the coastal environment:

(a) avoid adverse effects of activities on:

(i) indigenous taxa[4] that are listed as threatened[5] or at risk in the New Zealand Threat Classification System lists;

(ii) taxa that are listed by the International Union for Conservation of Nature and Natural Resources as threatened;

(iii) indigenous ecosystems and vegetation types that are threatened in the coastal environment, or are naturally rare[6];

(iv) habitats of indigenous species where the species are at the limit of their natural range, or are naturally rare;

(v) areas containing nationally significant examples of indigenous community types; and

(vi) areas set aside for full or partial protection of indigenous biological diversity under other legislation; and

(b) avoid significant adverse effects and avoid, remedy or mitigate other adverse effects of activities on:

(i) areas of predominantly indigenous vegetation in the coastal environment;

(ii) habitats in the coastal environment that are important during the vulnerable life stages of indigenous species;

(iii) indigenous ecosystems and habitats that are only found in the coastal environment and are particularly vulnerable to modification, including estuaries, lagoons, coastal wetlands, dunelands, intertidal zones, rocky reef systems, eelgrass and saltmarsh;

(iv) habitats of indigenous species in the coastal environment that are important for recreational, commercial, traditional or cultural purposes;

(v) habitats, including areas and routes, important to migratory species; and

(vi) ecological corridors, and areas important for linking or maintaining biological values identified under this policy.

Policy 12 Harmful aquatic organisms

(1) Provide in regional policy statements and in plans, as far as practicable, for the control of activities in or near the coastal marine area that could have adverse effects on the coastal environment by causing harmful aquatic organisms[7] to be released or otherwise spread, and include conditions in resource consents, where relevant, to assist with managing the risk of such effects occurring.

(2) Recognise that activities relevant to (1) include:

(a) the introduction of structures likely to be contaminated with harmful aquatic organisms;

(b) the discharge or disposal of organic material from dredging, or from vessels and structures, whether during maintenance, cleaning or otherwise; and whether in the coastal marine area or on land;

(c) the provision and ongoing maintenance of moorings, marina berths, jetties and wharves; and

(d) the establishment and relocation of equipment and stock required for or associated with aquaculture.

Policy 13 Preservation of natural character

(1) To preserve the natural character of the coastal environment and to protect it from inappropriate subdivision, use, and development:

(a) avoid adverse effects of activities on natural character in areas of the coastal environment with outstanding natural character; and

(b) avoid significant adverse effects and avoid, remedy or mitigate other adverse effects of activities on natural character in all other areas of the coastal environment;

including by:

(c) assessing the natural character of the coastal environment of the region or district, by mapping or otherwise identifying at least areas of high natural character; and

(d) ensuring that regional policy statements, and plans, identify areas where preserving natural character requires objectives, policies and rules, and include those provisions.

(2) Recognise that natural character is not the same as natural features and landscapes or amenity values and may include matters such as:

(a) natural elements, processes and patterns;

(b) biophysical, ecological, geological and geomorphological aspects;

(c) natural landforms such as headlands, peninsulas, cliffs, dunes, wetlands, reefs, freshwater springs and surf breaks;

(d) the natural movement of water and sediment;

(e) the natural darkness of the night sky;

(f) places or areas that are wild or scenic;

(g) a range of natural character from pristine to modified; and

(h) experiential attributes, including the sounds and smell of the sea; and their context or setting.

Policy 14 Restoration of natural character

Promote restoration or rehabilitation of the natural character of the coastal environment, including by :

(a) identifying areas and opportunities for restoration or rehabilitation;

(b) providing policies, rules and other methods directed at restoration or rehabilitation in regional policy statements, and plans;

(c) where practicable, imposing or reviewing restoration or rehabilitation conditions on resource consents and designations, including for the continuation of activities; and recognising that where degraded areas of the coastal environment require restoration or rehabilitation, possible approaches include:

(i) restoring indigenous habitats and ecosystems, using local genetic stock where practicable; or

(ii) encouraging natural regeneration of indigenous species, recognising the need for effective weed and animal pest management; or

(iii) creating or enhancing habitat for indigenous species; or

(iv) rehabilitating dunes and other natural coastal features or processes, including saline wetlands and intertidal saltmarsh; or

(v) restoring and protecting riparian and intertidal margins; or

(vi) reducing or eliminating discharges of contaminants; or

(vii) removing redundant structures and materials that have been assessed to have minimal heritage or amenity values and when the removal is authorised by required permits, including an archaeological authority under the Historic Places Act 1993; or

(viii) restoring cultural landscape features; or

(ix) redesign of structures that interfere with ecosystem processes; or

(x) decommissioning or restoring historic landfill and other contaminated sites which are, or have the potential to, leach material into the coastal marine area.

Policy 15 Natural features and natural landscapes

To protect the natural features and natural landscapes (including seascapes) of the coastal environment from inappropriate subdivision, use, and development:

(a) avoid adverse effects of activities on outstanding natural features and outstanding natural landscapes in the coastal environment; and

(b) avoid significant adverse effects and avoid, remedy, or mitigate other adverse effects of activities on other natural features and natural landscapes in the coastal environment; including by:

(c) identifying and assessing the natural features and natural landscapes of the coastal environment of the region or district, at minimum by land typing, soil characterisation and landscape characterisation and having regard to:

(i) natural science factors, including geological, topographical, ecological and dynamic components;

(ii) the presence of water including in seas, lakes, rivers and streams;

(iii) legibility or expressiveness—how obviously the feature or landscape demonstrates its formative processes;

(iv) aesthetic values including memorability and naturalness;

(v) vegetation (native and exotic);

(vi) transient values, including presence of wildlife or other values at certain times of the day or year;

(vii) whether the values are shared and recognised;

(viii) cultural and spiritual values for tangata whenua, identified by working, as far as practicable, in accordance with tikanga Māori; including their expression as cultural landscapes and features;

(ix) historical and heritage associations; and

(x) wild or scenic values;

(d) ensuring that regional policy statements, and plans, map or otherwise identify areas where the protection of natural features and natural landscapes requires objectives, policies and rules; and

(e) including the objectives, policies and rules required by (d) in plans.

Policy 16 Surf breaks of national significance

Protect the surf breaks[8] of national significance for surfing listed in Schedule 1, by:

(a) ensuring that activities in the coastal environment do not adversely affect the surf breaks; and

(b) avoiding adverse effects of other activities on access to, and use and enjoyment of the surf breaks.

Policy 17 Historic heritage identification and protection

Protect historic heritage[9] in the coastal environment from inappropriate subdivision, use, and development by:

(a) identification, assessment and recording of historic heritage, including archaeological sites;

(b) providing for the integrated management of such sites in collaboration with relevant councils, heritage agencies, iwi authorities and kaitiaki;

(c) initiating assessment and management of historic heritage in the context of historic landscapes;

(d) recognising that heritage to be protected may need conservation;

(e) facilitating and integrating management of historic heritage that spans the line of mean high water springs;

(f) including policies, rules and other methods relating to (a) to (e) above in regional policy statements, and plans;

(g) imposing or reviewing conditions on resource consents and designations, including for the continuation of activities;

(h) requiring, where practicable, conservation conditions; and

(i) considering provision for methods that would enhance owners' opportunities for conservation of listed heritage structures, such as relief grants or rates relief.

Policy 18 Public open space

Recognise the need for public open space within and adjacent to the coastal marine area, for public use and appreciation including active and passive recreation, and provide for such public open space, including by:

(a) ensuring that the location and treatment of public open space is compatible with the natural character, natural features and landscapes, and amenity values of the coastal environment;

(b) taking account of future need for public open space within and adjacent to the coastal marine area, including in and close to cities, towns and other settlements;

(c) maintaining and enhancing walking access linkages between public open space areas in the coastal environment;

(d) considering the likely impact of coastal processes and climate change so as not to compromise the ability of future generations to have access to public open space; and

(e) recognising the important role that esplanade reserves and strips can have in contributing to meeting public open space needs.

Policy 19 Walking access

(1) Recognise the public expectation of and need for walking access to and along the coast that is practical, free of charge and safe for pedestrian use.

(2) Maintain and enhance public walking access to, along and adjacent to the coastal marine area, including by:

(a) identifying how information on where the public have walking access will be made publicly available;

(b) avoiding, remedying or mitigating any loss of public walking access resulting from subdivision, use, or development; and

(c) identifying opportunities to enhance or restore public walking access, for example where:

(i) connections between existing public areas can be provided; or

(ii) improving access would promote outdoor recreation; or

(iii) physical access for people with disabilities is desirable; or

(iv) the long-term availability of public access is threatened by erosion or sea level rise; or

(v) access to areas or sites of historic or cultural significance is important; or

(vi) subdivision, use, or development of land adjacent to the coastal marine area has reduced public access, or has the potential to do so.

(3) Only impose a restriction on public walking access to, along or adjacent to the coastal marine area where such a restriction is necessary:

(a) to protect threatened indigenous species; or

(b) to protect dunes, estuaries and other sensitive natural areas or habitats; or

(c) to protect sites and activities of cultural value to Māori; or

(d) to protect historic heritage; or

(e) to protect public health or safety; or

(f) to avoid or reduce conflict between public uses of the coastal marine area and its margins; or

(g) for temporary activities or special events; or

(h) for defence purposes in accordance with the Defence Act 1990; or

(i) to ensure a level of security consistent with the purpose of a resource consent; or

(j) in other exceptional circumstances sufficient to justify the restriction.

(4) Before imposing any restriction under (3), consider and where practicable provide for alternative routes that are available to the public free of charge at all times.

Policy 20 Vehicle access

(1) Control use of vehicles, apart from emergency vehicles, on beaches, foreshore, seabed and adjacent public land where:

(a) damage to dune or other geological systems and processes; or

(b) harm to ecological systems or to indigenous flora and fauna, for example marine mammal and bird habitats or breeding areas and shellfish beds; or

(c) danger to other beach users; or

(d) disturbance of the peaceful enjoyment of the beach environment; or

(e) damage to historic heritage; or

(f) damage to the habitats of fisheries resources of significance to customary, commercial or recreational users; or

(g) damage to sites of significance to tangata whenua;

might result.

(2) Identify the locations where vehicular access is required for boat launching, or as the only practicable means of access to private property or public facilities, or for the operation of existing commercial activities, and make appropriate provision for such access.

(3) Identify any areas where and times when recreational vehicular use on beaches, foreshore and seabed may be permitted, with or without restriction as to type of vehicle, without a likelihood of any of (1)(a) to (g) occurring.

Policy 21 Enhancement of water quality

Where the quality of water in the coastal environment has deteriorated so that it is having a significant adverse effect on ecosystems, natural habitats, or water based recreational activities, or is restricting existing uses, such as aquaculture, shellfish gathering, and cultural activities, give priority to improving that quality by:

(a) identifying such areas of coastal water and water bodies and including them in plans;

(b) including provisions in plans to address improving water quality in the areas identified above;

(c) where practicable, restoring water quality to at least a state that can support such activities and ecosystems and natural habitats;

(d) requiring that stock are excluded from the coastal marine area, adjoining intertidal areas and other water bodies and riparian margins in the coastal environment, within a prescribed time frame; and

(e) engaging with tangata whenua to identify areas of coastal waters where they have particular interest, for example in cultural sites, wāhi tapu, other taonga, and values such as mauri, and remedying, or, where remediation is not practicable, mitigating adverse effects on these areas and values.

Policy 22 Sedimentation

(1) Assess and monitor sedimentation levels and impacts on the coastal environment.

(2) Require that subdivision, use, or development will not result in a significant increase in sedimentation in the coastal marine area, or other coastal water.

(3) Control the impacts of vegetation removal on sedimentation including the impacts of harvesting plantation forestry.

(4) Reduce sediment loadings in runoff and in stormwater systems through controls on land use activities.

Policy 23 Discharge of contaminants

(1) In managing discharges to water in the coastal environment, have particular regard to:

(a) the sensitivity of the receiving environment;

(b) the nature of the contaminants to be discharged, the particular concentration of contaminants needed to achieve the required water quality in the receiving environment, and the risks if that concentration of contaminants is exceeded; and

(c) the capacity of the receiving environment to assimilate the contaminants; and:

(d) avoid significant adverse effects on ecosystems and habitats after reasonable mixing;

(e) use the smallest mixing zone necessary to achieve the required water quality in the receiving environment; and

(f) minimise adverse effects on the life-supporting capacity of water within a mixing zone.

(2) In managing discharge of human sewage, do not allow:

(a) discharge of human sewage directly to water in the coastal environment without treatment; and

(b) the discharge of treated human sewage to water in the coastal environment, unless:

(i) there has been adequate consideration of alternative methods, sites and routes for undertaking the discharge; and

(ii) informed by an understanding of tangata whenua values and the effects on them.

(3) Objectives, policies and rules in plans which provide for the discharge of treated human sewage into waters of the coastal environment must have been subject to early and meaningful consultation with tangata whenua.

(4) In managing discharges of stormwater take steps to avoid adverse effects of stormwater discharge to water in the coastal environment, on a catchment by catchment basis, by:

(a) avoiding where practicable and otherwise remedying cross contamination of sewage and stormwater systems;

(b) reducing contaminant and sediment loadings in stormwater at source, through contaminant treatment and by controls on land use activities;

(c) promoting integrated management of catchments and stormwater networks; and

(d) promoting design options that reduce flows to stormwater reticulation systems at source.

(5) In managing discharges from ports and other marine facilities:

(a) require operators of ports and other marine facilities to take all practicable steps to avoid contamination of coastal waters, substrate, ecosystems and habitats that is more than minor;

(b) require that the disturbance or relocation of contaminated seabed material, other than by the movement of vessels, and the dumping or storage of dredged material does not result in significant adverse effects on water quality or the seabed, substrate, ecosystems or habitats;

(c) require operators of ports, marinas and other relevant marine facilities to provide for the collection of sewage and waste from vessels, and for residues from vessel maintenance to be safely contained and disposed of; and

(d) consider the need for facilities for the collection of sewage and other wastes for recreational and commercial boating.

Policy 24 Identification of coastal hazards

(1) Identify areas in the coastal environment that are potentially affected by coastal hazards (including tsunami), giving priority to the identification of areas at high risk of being affected. Hazard risks, over at least 100 years, are to be assessed having regard to:

(a) physical drivers and processes that cause coastal change including sea level rise;

(b) short-term and long-term natural dynamic fluctuations of erosion and accretion;

(c) geomorphological character;

(d) the potential for inundation of the coastal environment, taking into account potential sources, inundation pathways and overland extent;

(e) cumulative effects of sea level rise, storm surge and wave height under storm conditions;

(f) influences that humans have had or are having on the coast;

(g) the extent and permanence of built development; and

(h) the effects of climate change on:

(i) matters (a) to (g) above;

(ii) storm frequency, intensity and surges; and

(iii) coastal sediment dynamics;

taking into account national guidance and the best available information on the likely effects of climate change on the region or district.

Policy 25 Subdivision, use, and development in areas of coastal hazard risk

In areas potentially affected by coastal hazards over at least the next 100 years:

(a) avoid increasing the risk[10] of social, environmental and economic harm from coastal hazards;

(b) avoid redevelopment, or change in land use, that would increase the risk of adverse effects from coastal hazards;

(c) encourage redevelopment, or change in land use, where that would reduce the risk of adverse effects from coastal hazards, including managed retreat by relocation or removal of existing structures or their abandonment in extreme circumstances, and designing for relocatability or recoverability from hazard events;

(d) encourage the location of infrastructure away from areas of hazard risk where practicable;

(e) discourage hard protection structures and promote the use of alternatives to them, including natural defences; and

(f) consider the potential effects of tsunami and how to avoid or mitigate them.

Policy 26 Natural defences against coastal hazards

(1) Provide where appropriate for the protection, restoration or enhancement of natural defences that protect coastal land uses, or sites of significant biodiversity, cultural or historic heritage or geological value, from coastal hazards.

(2) Recognise that such natural defences include beaches, estuaries, wetlands, intertidal areas, coastal vegetation, dunes and barrier islands.

Policy 27 Strategies for protecting significant existing development from coastal hazard risk

(1) In areas of significant existing development likely to be affected by coastal hazards, the range of options for reducing coastal hazard risk that should be assessed includes:

(a) promoting and identifying long-term sustainable risk reduction approaches including the relocation or removal of existing development or structures at risk;

(b) identifying the consequences of potential strategic options relative to the option of 'do-nothing';

(c) recognising that hard protection structures may be the only practical means to protect existing infrastructure of national or regional importance, to sustain the potential of built physical resources to meet the reasonably foreseeable needs of future generations;

(d) recognising and considering the environmental and social costs of permitting hard protection structures to protect private property; and

(e) identifying and planning for transition mechanisms and timeframes for moving to more sustainable approaches.

(2) In evaluating options under (1):

(a) focus on approaches to risk management that reduce the need for hard protection structures and similar engineering interventions;

(b) take into account the nature of the coastal hazard risk and how it might change over at least a 100-year timeframe, including the expected effects of climate change; and

(c) evaluate the likely costs and benefits of any proposed coastal hazard risk reduction options.

(3) Where hard protection structures are considered to be necessary, ensure that the form and location of any structures are designed to minimise adverse effects on the coastal environment.

(4) Hard protection structures, where considered necessary to protect private assets, should not be located on public land if there is no significant public or environmental benefit in doing so.

Policy 28 Monitoring and reviewing the effectiveness of the NZCPS

(1) To monitor and review the effectiveness of the NZCPS in achieving the purpose of the Act, the Minister of Conservation should:

(a) in collaboration with local authorities collect data for, and, as far as practicable, incorporate district and regional monitoring information into a nationally consistent monitoring and reporting programme;

(b) undertake other information gathering or monitoring that assists in providing a national perspective on coastal resource management trends, emerging issues and outcomes;

(c) within six years of its gazettal, assess the effect of the NZCPS on regional policy statements, plans, and resource consents, and other decision making; and

(d) publish a report and conclusions on matters (a) to (c) above.

Policy 29 Restricted Coastal Activities

(1) The Minister of Conservation does not require any activity to be specified as a restricted coastal activity in a regional coastal plan.

(2) Local authorities are directed under sections 55 and 57 of the Act to amend documents as necessary to give effect to this policy as soon as practicable, without using the process in Schedule 1 of the Act, with the effect that:

(a) any activity specified as a discretionary activity and a restricted coastal activity becomes a discretionary activity only;

(b) any activity specified as a non-complying activity and a restricted coastal activity becomes a non-complying activity only.

(3) Any application for a coastal permit for an activity specified as a restricted coastal activity that has been publicly notified before the date the amendments in clause (2) are made shall continue to be treated as an application for a restricted coastal activity for the purposes of section 117 of the Act.

(4) Any other application for an activity specified as a restricted coastal activity made before the date of the amendments in clause (2), shall be considered as a discretionary or non-complying activity in accordance with the regional coastal plan or proposed regional coastal plan's classification and section 117 does not apply.

Schedule 1

Surf Breaks of National Significance

Northland
Peaks – Shipwreck Bay
Peaks – Super tubes – Mukie 2 – Mukie 1

Waikato
Manu Bay – Raglan
Whale Bay – Raglan
Indicators – Raglan

Taranaki
Waiwhakaiho
Stent Road – Backdoor Stent – Farmhouse Stent

Gisborne
Makorori Point – Centres
Wainui – Stock Route – Pines – Whales
The Island

Coromandel
Whangamata Bar

Kaikoura
Mangamaunu
Meatworks

Otago
The Spit
Karitane
Whareakeake
Papatowai

Glossary

Hard protection structure	Includes a seawall, rock revetment, groyne, breakwater, stop bank, retaining wall or comparable structure or modification to the seabed, foreshore or coastal land that has the primary purpose or effect of protecting an activity from a coastal hazard, including erosion.
Harmful aquatic organisms	Aquatic organisms which, if introduced into coastal water, may adversely affect the environment or biological diversity, pose a threat to human health, or interfere with legitimate use or protection of natural and physical resources in the coastal environment.
Infrastructure	As defined in section 2 of the Resource Management Act 1991, notwithstanding the reference in section 2 to section 30.
Intertidal zone or area	The landward boundary of the intertidal zone or area is the extreme high water of spring tides, which is the average of the two highest tides at the period of the year when the range of the tides is greatest. The seaward boundary of the intertidal zone or area is the extreme low water of spring tides, which is the average of the two lowest tides at the period of the year when the range of the tides is greatest.
Land Typing	Describes land types which form the basis over which land cover, land use and association information are addressed as the basis for land characterisation.
Landscape characterisation	Utilises the land typing base and overlay with land cover, land use and associations affecting or affected by coastal processes.
Marine facilities	Include ports, dry docks, slipways, moorings, marinas, moorings, boat servicing grids, wharves, jetties and ramps, offshore platforms, navigational aids, and associated structures and activities.
Mātauranga Māori	Māori customary knowledge, traditional knowledge or intergenerational knowledge.
Mixing Zone	The area within which 'reasonable mixing' of contaminants from discharges occurs in receiving waters and within which the relevant water quality standards do not apply.
Naturally rare	Originally rare: rare before the arrival of humans in New Zealand.

Papakāinga development	Development of a communal nature on ancestral land owned by Māori.
Predictive Modelling	Mathematical and computer modelling of archaeological location.
Pūkenga	A person skilled or versed in the customary and traditional knowledge, tikanga, arts, histories and genealogies of a particular iwi or hapū.
Risk	Risk is often expressed in terms of a combination of the consequences of an event (including changes in circumstances) and the associated likelihood of occurrence (AS/NZS ISO 31000:2009 Risk management – Principles and guidelines, November 2009).
Substrate	Material that forms the surface of the foreshore and seabed.
Surf break	A natural feature that is comprised of swell, currents, water levels, seabed morphology, and wind. The hydrodynamic character of the ocean (swell, currents and water levels) combines with seabed morphology and winds to give rise to a 'surfable wave'. A surf break includes the 'swell corridor' through which the swell travels, and the morphology of the seabed of that wave corridor, through to the point where waves created by the swell dissipate and become non-surfable. 'Swell corridor' means the region offshore of a surf break where ocean swell travels and transforms to a 'surfable wave'. 'Surfable wave' means a wave that can be caught and ridden by a surfer. Surfable waves have a wave breaking point that peels along the unbroken wave crest so that the surfer is propelled laterally along the wave crest.
Taxa	Named biological classification units assigned to individuals or sets of species (e.g. species, subspecies, genus, order, variety).

Footnotes

1 Mātauranga Māori: as defined in the Glossary.
2 Pūkenga: as defined in the Glossary.
3 Papakāinga: as defined in the Glossary.
4 Taxa: as defined in the Glossary.
5 Examples of taxa listed as threatened are: Maui's dolphin, Hector's dolphin, New Zealand fairy tern, Southern New Zealand dotterel.
6 Naturally rare: as defined in the Glossary.
7 Harmful aquatic organisms: as defined in the Glossary.
8 Surf break: as defined in the Glossary.
9 Refer to definition in section 2 of the Act.
10 Risk: as defined in the Glossary.

APPENDIX TWO – HAURAKI GULF MARINE PARK ACT 2000

Part 1

Management of Hauraki Gulf

7 Recognition of national significance of Hauraki Gulf

(1) The interrelationship between the Hauraki Gulf, its islands, and catchments and the ability of that interrelationship to sustain the life-supporting capacity of the environment of the Hauraki Gulf and its islands are matters of national significance.

(2) The life-supporting capacity of the environment of the Gulf and its islands includes the capacity—

(a) to provide for—

(i) the historic, traditional, cultural, and spiritual relationship of the tangata whenua of the Gulf with the Gulf and its islands; and

(ii) the social, economic, recreational, and cultural well-being of people and communities:

(b) to use the resources of the Gulf by the people and communities of the Gulf and New Zealand for economic activities and recreation:

(c) to maintain the soil, air, water, and ecosystems of the Gulf.

8 Management of Hauraki Gulf

To recognise the national significance of the Hauraki Gulf, its islands, and catchments, the objectives of the management of the Hauraki Gulf, its islands, and catchments are—

(a) the protection and, where appropriate, the enhancement of the life-supporting capacity of the environment of the Hauraki Gulf, its islands, and catchments:

(b) the protection and, where appropriate, the enhancement of the natural, historic, and physical resources of the Hauraki Gulf, its islands, and catchments:

(c) the protection and, where appropriate, the enhancement of those natural, historic, and physical resources (including kaimoana) of the Hauraki Gulf, its islands, and catchments with which tangata whenua have an historic, traditional, cultural, and spiritual relationship:

(d) the protection of the cultural and historic associations of people and communities in and around the Hauraki Gulf with its natural, historic, and physical resources:

(e) the maintenance and, where appropriate, the enhancement of the contribution of the natural, historic, and physical resources of the Hauraki Gulf, its islands, and catchments to the social and economic well-being of the people and communities of the Hauraki Gulf and New Zealand:

(f) the maintenance and, where appropriate, the enhancement of the natural, historic, and physical resources of the Hauraki Gulf, its islands, and catchments, which contribute to the recreation and enjoyment of the Hauraki Gulf for the people and communities of the Hauraki Gulf and New Zealand.

9 Relationship of Act with Resource Management Act 1991

(1) For the purposes of this section and section 10, the terms district plan, plan, proposed plan, regional plan, regional policy statement, resource consent, and New Zealand coastal policy statement have the same meaning as in the Resource Management Act 1991, and regional council and territorial authority have the same meaning as in the Local Government Act 2002.

(2) A regional council must ensure that any part of a regional policy statement or a regional plan that applies to the Hauraki Gulf, its islands, and catchments, does not conflict with sections 7 and 8.

(3) A territorial authority must ensure that any part of a district plan that applies to the Hauraki Gulf, its islands, and catchments, does not conflict with sections 7 and 8.

(4) A consent authority must, when considering an application for a resource consent for the Hauraki Gulf, its islands, and catchments, have regard to sections 7 and 8 in addition to the matters contained in the Resource Management Act 1991.

(5) The provisions of section 55 of the Resource Management Act 1991 apply as though sections 7 and 8 of this Act were a national policy statement and a regional council or a territorial authority must take action in accordance with that section and notify a change to a regional policy statement, plan, or proposed plan within 5 years of the date of commencement of this Act.

Section 9(1): amended, on 1 July 2003, by section 262 of the Local Government Act 2002 (2002 No 84).

10 Creation of New Zealand coastal policy statement by this Act

(1) For the coastal environment of the Hauraki Gulf, sections 7 and 8 must be treated as a New Zealand coastal policy statement issued under the Resource Management Act 1991.

(2) For the coastal environment of the Hauraki Gulf, if there is a conflict between sections 7 and 8 and the provisions of any New Zealand coastal policy statement issued under the Resource Management Act 1991, the New Zealand coastal policy statement prevails.

(3) The provisions of section 55 of the Resource Management Act 1991 apply to the New Zealand coastal policy statement created by this section and a regional council or a territorial authority must take action in accordance with that section and notify a change to a regional policy statement, plan, or proposed plan within 5 years of the date of commencement of this Act.

11 Statements of general policy under Conservation Act 1987 and Acts in Schedule 1 of that Act

(1) For the purposes of each of the following Acts for the Hauraki Gulf, sections 7 and 8 have the same effect as a statement of general policy approved under the following specified sections:

(a) Wildlife Act 1953, section 14C:

(b) Marine Reserves Act 1971, section 6:

(c) Reserves Act 1977, section 15A:

(d) Wild Animal Control Act 1977, section 5:

(e) Marine Mammals Protection Act 1978, section 3B:

(f) National Parks Act 1980, section 44:

(g) Conservation Act 1987, section 17B.

(h) *[Repealed]*

(2) Where a statement of general policy is created by this section and the Act to which that statement of general policy applies contains a provision stating that the general policy must not derogate from the provisions of that Act, the requirement in subsection (1) may be implemented for the Hauraki Gulf only to the extent that implementation does not derogate from the provisions of that Act.

(3) Where a conservation management strategy or a conservation management plan made under an Act listed in this section derogates from a statement of general policy created by this section, the requirement that the strategy or plan must not derogate from a statement of general policy does not take effect for any statement of general policy made under this section until the date that the strategy or plan is next amended or reviewed.

Section 11(1)(h): repealed, on 30 September 2008, by section 82 of the Walking Access Act 2008 (2008 No 101).

12 Amendment to Fisheries Act 1996

Amendment(s) incorporated in the Act(s).

13 Obligation to have particular regard to sections 7 and 8

Except as provided in sections 9 to 12, in order to achieve the purpose of this Act, all persons exercising powers or carrying out functions for the Hauraki Gulf under any Act specified in Schedule 1 must, in addition to any other requirement specified in those Acts for the exercise of that power or the carrying out of that function, have particular regard to the provisions of sections 7 and 8.

14 Preservation of existing rights

(1) Nothing in this Act limits or affects any title or right to ownership of the foreshore, seabed, or other land or natural resources of the Hauraki Gulf, its islands, and catchments, whether that title or right to ownership is conferred by Act, common law, or in any other manner.

(2) Nothing in this Act limits or affects the ability of any person to bring a claim or to continue any existing claim in any court or tribunal relating to the foreshore, seabed, or other land or arising out of the application of the Treaty of Waitangi, or any Act, or at common law, or in any other manner.

(3) Nothing in this section limits or affects any remedy associated with any claim referred to in subsection (2).

Schedule 1 s 13

Acts to which Part 1 applies

Biosecurity Act 1993 (Part 5)
Conservation Act 1987
Fisheries Act 1983
Fisheries Act 1996
Harbour Boards Dry Land Endowment Revesting Act 1991
Historic Places Act 1993
Local Government Act 1974
Local Government Act 2002
Marine and Coastal Area (Takutai Moana) Act 2011
Marine Farming Act 1971
Marine Mammals Protection Act 1978
Marine Reserves Act 1971
National Parks Act 1980
Native Plants Protection Act 1934
Queen Elizabeth the Second National Trust Act 1977
Reserves Act 1977
Resource Management Act 1991
Soil Conservation and Rivers Control Act 1941
Trade in Endangered Species Act 1989
Walking Access Act 2008
Wild Animal Control Act 1977
Wildlife Act 1953

Schedule 1: amended, on 1 April 2011, by section 128 of the Marine and Coastal Area (Takutai Moana) Act 2011 (2011 No 3).

Schedule 1: amended, on 30 September 2008, by section 82 of the Walking Access Act 2008 (2008 No 101).

Schedule 1: amended, on 1 July 2003, by section 262 of the Local Government Act 2002 (2002 No 84).

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NB: references in **bold** are to illustrations.

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Te Kouma, Thames-Coromandel District

New Zealand has a long, varied and spectacular coastline. It supports a diverse range of habitats and species. It is also a location which has been highly favoured by people since early human settlement. Today the New Zealand coast is of enormous environmental, social, cultural and economic importance. Being able to freely enjoy the coast is an integral part of the New Zealand way of life. But with the growing pressures and threats facing the coastal environment, we are at risk of losing the very qualities of the coast that we value the most.

This fully updated and expanded Guide to managing New Zealand's coastal environment sets out how these challenges can be better addressed. It identifies how the strengthened provisions of the New Zealand Coastal Policy Statement 2010 can be proactively implemented to achieve better outcomes for the coast.

The Guide describes the valuable lessons learnt over the past decade in the planning and design of coastal developments and offers insights into current best practice in the field. It is an invaluable resource for coastal developers, coastal managers, professional advisors, students, people living in coastal communities and anyone else concerned with better managing and protecting New Zealand's coastal environment.

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