

Plan Topics Coastal Land Development



Coastal Land Development

This guidance note aims to assist resource management practitioners understand the issues associated with coastal land development and help address the challenges of management by:

- outlining the framework for coastal management including relevant legislation and roles and responsibilities
- providing guidance on the principles for coastal planning and management
- outlining the key management issues arising from coastal land development
- identifying key methods for managing coastal land development.

The coastal environment is dynamic and sensitive. If it is not managed proactively, coastal land development pressures can lead to adverse effects, both on land and within the coastal marine area.

Some 'flow-on effects' of coastal land development on the coastal marine area are recognised and discussed. Some issues are not directly addressed such as ports and marinas and other infrastructure (such as roads, cables and pipelines) dredging and sand extraction, reclamations and declamations, and marine energy generation.

Guidance note

Introduction and the framework and principles for coastal management

Issues relating to coastal land development

Methods for managing coastal land development impacts



Introduction and the framework and principles for coastal management

Introduction

What this guidance covers

Managing the effects of coastal land development on the wider coastal environment can be complex. The interconnected nature of natural and physical resources, as they adjust to changes, means that the use of coastal land and land uses will often affect other coastal uses and values including downstream receiving environments. The subdivision, use and development of coastal land creates flow-on effects to the coastal marine area.

The complexity of managing coastal land development is exacerbated by:

- lack of knowledge about the coast
- resource management issues often cross jurisdictional responsibilities and require integrated management and strategic planning
- the importance of taking account of the principles of the Treaty of Waitangi and recognising and providing for the special relationship of tangata whenua with the coastal environment
- the wide range of effects that may be generated by existing and new coastal land developments, with potential to adversely affect all the matters of national importance identified in s6 of the RMA; for example coastal hazard risks to existing and new developments.

This guidance note provides an overview of the key issues arising from coastal land development, including:

- managing activities in the coastal environment
- protecting indigenous coastal biodiversity
- preserving the natural character of the coastal environment
- protecting coastal landscapes
- maintaining coastal biodiversity
- maintaining and enhancing public access
- identifying and protecting coastal historic heritage
- managing water quality
- managing coastal hazards.

There are many coastal management considerations that are outside the scope of this guidance note. While decision making on new and existing development within the coastal marine area is outside the scope of this guidance note, it is important to consider the coastal marine area activities resulting from coastal land development.

The framework for coastal management

The New Zealand Coastal Policy Statement 2010 (NZCPS 2010) provides policy direction for coastal management in New Zealand under the Resource Management Act 1991 (RMA). <u>Section 56 of the RMA</u> sets out the purpose of the NZCPS, which is to state policies to achieve the purpose of the RMA in relation to the coastal environment. The



RMA established a coastal management regime based on a partnership between the Crown and regional and local authorities.

The RMA requires a NZCPS to guide local authorities in their management of the coastal environment. Local authorities must give effect to the NZCPS in planning documents and resource consent authorities must have regard to it when considering consent applications. The NZCPS 1994 was replaced by the <u>NZCPS 2010</u>. Implementation guidance on the NZCPS 2010 is provided on the <u>Department of Conservation website</u>.

The NZCPS 2010 provides direction to councils on strategic coastal planning. This supports giving developers and communities more certainty about where coastal land development will be appropriate, where it is likely to require careful consideration, and where it should not happen, as articulated in plans. The NZCPS 2010 supports good environmental outcomes consistent with the sustainable management purpose of the RMA.

Roles and responsibilities

The Minister of Conservation, regional councils and territorial authorities have responsibilities under the RMA for managing coastal development. RMA coastal management jurisdictions are depicted in Figure 1.

Figure 1: RMA Coastal management jurisdictions (Source Department of Conservation)



RMA coastal management jurisdictions

MHWS = Mean High Water Springs MLWS = Mean Low Water Springs EEZ = Exclusive Economic Zone Cont Shelf = Continental Shelf EEZ + CS Act = Eclusive Economic Zone + Continental Shelf (Economic Effects) Act 2012 n.m. = nautical miles



Minister of Conservation's responsibilities

The Minister of Conservation is responsible under <u>section 28 of the RMA</u> for preparing and monitoring the effect and implementation of the NZCPS. The NZCPS promotes the sustainable management of the natural and physical resources of the coastal environment, including coastal land and waters to the 12 nautical mile limit. The Minister is also responsible for approving regional coastal plans and regional coastal plan changes.

Regional council responsibilities

The functions of regional councils are set out in <u>section 30 of the RMA</u>. Regional councils are responsible for preparing and implementing regional policy statements and regional plans, including a mandatory regional coastal plan which covers the coastal marine area. Regional councils may incorporate the regional coastal plan into a regional plan that applies to the wider coastal environment (often referred to as regional coastal environment plans) to encompass the coastal marine area and any related part of the coastal environment (refer section 64(2) RMA).

Territorial authority responsibilities

The functions of territorial authorities are set out in <u>section 31 of the RMA</u>. Territorial authorities are responsible for preparing and implementing district plans to manage effects from the use, development or protection of land on the landward side of the CMA. Territorial authorities also may impose bylaws under the <u>Local Government Act 2002</u>.

Other relevant legislation and information

A strategic and integrated approach is needed for coastal management. There are a number of agencies with responsibilities for the coastal environment under legislation other than the RMA. It is important to keep in mind the functions and responsibilities of different management agencies, and the methods available for managing coastal land development under other statutes. Statutory methods for coastal land development may be carried out under the:

- <u>Marine and Coastal Area Act 2011</u> (for definition and management of the common marine and coastal area, a subset of the coastal marine area, including things like customary title and abandoned structures)
- Local Government Act 2002 (eg, bylaws and long-term plans)
- <u>Reserves Act 1977</u> (eg, reserves management plans)
- <u>Historic Places Act 1993</u> (eg, protecting historic built areas and heritage).

There are also alternative sources of information and guidance currently available on the <u>New Zealand Coastal Policy Statement 2010</u>, <u>aquaculture</u>, <u>The Fisheries Act 1996</u> and the <u>Marine and Coastal Area (Takutai Moana) Act 2011</u>. It is recommended that readers of this guidance go to these websites for additional guidance on roles and responsibilities under other legislation than the RMA.



Principles for coastal management

The <u>New Zealand Coastal Policy Statement 2010</u> (NZCPS 2010) identifies 7 policy objectives and 29 related policies that provide national direction and priorities for coastal management in New Zealand under the RMA. Policies 1-7 of the NZCPS 2010 are about processes, approaches and directions to support coastal decision making. The intent of the NZCPS 2010 as a whole should be considered when thinking about how best to plan and manage existing and new coastal land development.

The <u>NZCPS 2010</u> objectives and policies direct decision making in the coastal environment, and includes:

- Policy 1 understanding the extent and characteristics of the coastal environment, including its dynamic nature.
- Policy 2 taking account of the principles of the Treaty of Waitangi and kaitiakitanga in relation to the coastal environment and involving tangata whenua in coastal decision making.
- Policy 3 applying a precautionary approach to managing activities in the coastal environment when the effects are uncertain but potentially significantly adverse, including climate change effects.
- Policy 4 promoting integrated coastal management of both natural and physical resources in the coastal environment, and any activities that affect that environment. This includes having coordinated management of activities that cross administrative boundaries and a collaborative approach to management.
- Policy 5 considering the effects on land and water in the coastal environment held or managed under other Acts such as the Conservation Act 1987.
- Policy 6 direction for decision makers to consider, when managing activities in the coastal environment, including appropriateness, functional need to be in the coast, the needs of communities and future generations and promoting the efficient use of occupied space.
- Policy 7 promoting strategic planning in the preparation of regional policy statements, regional plans and district plans.

The direction relating to tangata whenua and strategic and integrated coastal management is considered below in further detail.

Tangata whenua's special relationship with the coast

Tangata whenua generally want to be active participants in coastal planning and management. Tangata whenua have a special relationship with the coastal environment that focuses on their role as kaitiaki of the coast, and traditional, cultural and heritage values. Māori cultural and heritage values associated with the coastal environment may include:

- sites and areas that reflect the long relationship of tangata whenua with the coastal environment, including nohoanga (temporary campsites), tauranga waka (canoe landing sites), pa (fortified settlements), ana (caves), wahi pakanga (historical battle sites) and pou whenua (traditional markers, landforms/trees)
- areas of reefs, rock formations, fishing grounds
- cultural and spiritual sites including islands, peninsulas, headlands and inlets



- wahi tapu, including urupa (burial sites) and wahi taonga (treasured places or things)
- mahinga kai values, including kaimoana (food sourced from the sea), taonga raranga (plants for weaving/manufacturing), and rongoa (medicinal species) customary use/management practices, including rahui, mataitai and taiapure
- areas where early encounters between Māori and Pakeha occurred.

The role of kaitiaki involves a responsibility to ensure that the mauri (life supporting capacity and essence) of the coastal environment is protected, and that coastal resources are sustained for future generations to enjoy.

Some Māori have a commercial interest in the coast and businesses built on coastal resources. The coast has always been highly valued by tangata whenua due to the wealth of resources it offers. This is reflected in early patterns of settlement and the number of sites and areas of importance to tangata whenua located within the coastal environment. Tangata whenua take a holistic and integrated management approach towards the coastal environment. This concept is known as ki uta ki tai: from the mountains to the sea.

The relationship of tangata whenua with the coast is specifically recognised in Part II of the RMA in <u>s6 (e), 6(f), 6(g), 7(a)</u> and <u>s8</u>.

Objective 3 of the NZCPS 2010 recognises that tangata whenua are kaitiaki of the coastal environment. The <u>NZCPS 2010 Implementation Guidance</u> and <u>Consultation with Tangata</u> <u>Whenua Guidance Note</u> provide guidance on recognising kaitiakitanga in RMA consultation and decision-making process and the benefits of consulting with tangata whenua to identify their significant issues in the coastal environment. Key coastal issues for tangata whenua, and policies to address those issues are sometimes set out in iwi management plans.

Policy 2 of the NZCPS 2010 is about the Treaty of Waitangi, the connection and relationships that tangata whenua have with the coastal environment, tangata whenua involvement in coastal decision making and Māori culture and heritage values. Policy 2 focuses on ways in which local authorities can actively involve tangata whenua in their planning processes and decision-making to enable tangata whenua to be active participants in coastal planning and management.

Policy 2 also focuses on protecting the characteristics of the coastal environment that are of special value to tangata whenua; Māori cultural well-being; recognising Māori values in coastal management; recognising and providing for Māori culture and heritage values and the importance of consultation and collaboration with tangata whenua.

Policy 17 of the NZCPS 2010 is about historic heritage identification and protection and includes involving iwi authorities and kaitiaki.

Further guidance is provided in relation to tangata whenua's special relationship with the coast on the Department of Conservation website, <u>NZCPS 2010 implementation</u> <u>guidance</u>.



THE RMA QUALITY PLANNING RESOURCE

Other important legislation to consider when providing for the special relationship of tangata whenua with the coast includes:

- the Marine and Coastal Area (Takutai Moana) Act 2011 (MCAA) with a purpose of establishing a durable scheme to ensure protection of all legitimate interests of all New Zealanders in the marine and coastal area and to recognise the mana of tangata whenua. The MCA Act provides for recognition of customary interests in the common marine and coastal area (which is a subset of the marine and coastal area), including:
 - Customary marine title (sections 58-93)
 - Protected customary rights (sections 51-57)
 - Participation in conservation processes (sections 47-50).

The MCA Act came into force on 1 April 2011 after the NZCPS 2010 had taken effect. Practitioners need to refer directly to the MCA for their obligations. It should be noted that the MCA Act included consequential amendments to the RMA so that obligations under the MCA Act are highlighted.

- the <u>Fisheries Act 1996</u> which provides for the establishment of taiāpure, mātaitai reserves, and temporary closures (eg, rāhui) as required (see the <u>Ministry for</u> <u>Primary Industries' website</u> for more information.
- the <u>Local Government Act 2002</u> which has a number of provisions relating to Maori involvement in local government decision making processes.
- the <u>Historic Places Act 1993</u> which promotes the identification, protection, preservation and conservation of the historical and cultural heritage of New Zealand.

Readers of this guidance need to also be aware of any relevant Treaty settlements and legislation arising from them.

Strategic planning and integrated management

The <u>NZCPS 2010</u> promotes a strategic and integrated approach to coastal planning and management which is highly relevant to existing and new coastal land development. It seeks that practitioners proactively address resource management issues in the coastal environment in a way that promotes sustainable management to avoid the incremental loss of coastal values and reduce ad hoc development.

Policy 7 of the NZCPS 2010 requires strategic planning in the preparation of regional policy statements, regional plans and district plans and in particular:

- to consider where, how and when to provide for activities in the coastal environment
- to identify where uses are inappropriate
- to identify coastal processes, resources or values that are under threat or at significant risk from adverse cumulative effects and where practicable setting thresholds in plans to help determine when activities causing adverse cumulative effects are also to be avoided.

The NZCPS 2010 provides further information on what strategic coastal planning and management means through policies including Policy 3 Precautionary approach, Policy 4 Integration (which is discussed in more detail below), Policy 8 Aquaculture, Policy 9 Ports



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and Policy 10 Reclamation and De-reclamation. Further direction is provided in relation to the information required for important values such as Policies 11 Indigenous biological diversity, Policy 13 Preservation of natural character and Policy 15 Natural features and natural landscapes; also Policy 21 identification of degraded water quality and Policies 24-27 for a strategic approach to hazards management. These policies, and Policy 6, outline expectations about how particular coastal uses and activities are to be managed and a strategic approach is promoted.

Coastal land development issues and effects often cross jurisdictional boundaries. Policy 4 of the NZCPS 2010 requires integrated management of natural and physical resources in the coastal environment. Practitioners need to take a coordinated approach to activities that cross administrative boundaries and a collaborative approach to management.

Further information on integrated coastal management, including case studies, can be found in the Department of Conservation <u>NZCPS 2010 implementation guidance</u> and the Environmental Defence Society publication <u>Beyond the Tide: Integrating the management of New Zealand's coasts</u>.

Getting started

Developing a strategic and integrated response to coastal land development under the RMA involves:

- gathering information
- consultation
- identifying and assessing coastal development issues and outcomes
- developing an appropriate resource management strategy
- developing objectives, policies and methods to address coastal development issues and achieve specified environmental outcomes.

Coastal land development issues are associated with numerous effects and should not be considered in isolation from wider resource management issues.

Gathering information

Gathering information, monitoring and research is important for managing coastal land development and should be included as part of policy statement and plan processes. See <u>Policy and Plan Effectiveness Monitoring Guidance Note</u> and the <u>Writing Plan Provisions</u> for Regional and District Plans Guidance Note.

Gathering information and research is a vital part of the process. This may involve the preparation of technical reports, which are ideally peer reviewed and made publicly available so the community can understand the decisions that are being made about how coastal land is being planned for and managed. Having peer reviewed technical reports available can give the community confidence in the findings and the decisions made.



Consultation

Consultation is an effective way to identify community aspirations, concerns, and areas of contention in relation to coastal land development. Consultation is critical to determine the appropriate management strategies and should be an integral part of any approach taken.

Consultation with tangata whenua, through iwi authorities, is mandatory when developing policy statements and plans. Consultation helps ensure that coastal management issues of significance to tangata whenua are identified early and addressed in the management approach. It also enables tangata whenua to be actively involved in the exercise of kaitiakitanga.

For more information refer to the <u>Consultation for plan development</u> and <u>Consultation</u> <u>with Tangata Whenua</u> Guidance Notes.

Identify and assess the issues and desired outcomes

Existing and new coastal land development has many associated resource management issues. Careful planning and management is required to identify and assess the relevant issues to protect the coastal environment from inappropriate subdivision, use and development. Key questions to consider include:

- what are the key coastal components that need to be protected and enhanced?
- what areas and features are important in terms of s6 RMA?
- how is the coastal environment valued and how does it contribute to the well-being of the district/region?

Information gathering and consultation will play a key role in determining the answers to these questions.

Develop a resource management strategy and framework

There is often no simple solution to address the resource management issues associated with existing or new coastal land development. Each council needs to develop its own response, having regard to the characteristics and issues of their district or region while taking steps to integrate management across boundaries. The best response is likely to come from a mix of regulatory and non-regulatory methods and should:

- build on the technical information and assessments relating to identification and management of issues
- have regard to feedback from the community and stakeholders
- give effect to relevant matters contained in national/regional policy statements
- have regard to any plans or strategies prepared by the council (eg, Long-term plans and growth strategies) and by other agencies with responsibilities within the coastal environment, including the Department of Conservation
- consider links with non-RMA plans and strategies
- take into account any relevant iwi management plan or any other relevant planning documents recognised by an iwi authority



• consider the cumulative effects of coastal land development and monitoring and research are particularly important in assessing these effects.

Develop objectives, policies, methods and specify outcomes

Once the issues associated with coastal development are understood for the particular region or district, RMA practitioners should develop provisions in their planning documents to achieve specified environmental outcomes. The sorts of issues that may arise in relation to coastal development are considered below.



Issues relating to coastal land development

Managing activities in the coastal environment

Coastal development is often accompanied by increasing competition between different users for space for their activities within the coastal environment. There is demand for space for buildings, structures, and facilities, both on land and within the coastal marine area. This demand comes from the need to support recreational activities (eg, walking, swimming, surfing, kayaking, jet skiing and boating), commercial activities (eg, ports and aquaculture), and infrastructure (eg, roading, seawalls, stormwater outfalls, and marine energy generation).

The supply of land on the coast is often limited by natural topography. Coastal land is affected by the dynamic influence of the coast including sea and weather. Where coastal development uses and activities are not compatible or are not managed proactively and effectively, there can be loss of property, loss of public values, and damage to important infrastructure. Competition for space can also cause conflict. This may restrict public access to varying degrees, impact on natural character and coastal landscapes, increasing the risks from natural hazards, affect coastal historic heritage, impact on coastal biodiversity and the special relationship of tangata whenua with the coastal environment.

The coastal marine area is part of the coastal environment. Understanding the extent, characteristics and dynamic nature of the coastal environment is important for managing the wide range of coastal development issues, activities and effects within the coastal environment.

Policy 1 of the <u>NZCPS 2010</u> provides a list of key components that form part of the coastal environment. It also reminds practitioners that it is important to 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.

Practitioners have used a number of different approaches to translate an understanding of the coastal environment into RPSs and plans. Whatever method is used, policy statements and plans will need to consider the uses and values within the coastal environment in some way. Plans may use criteria and descriptions to aid understanding of the coastal environment or map this environment but it will depend on the specifics of the area. Further guidance on defining the extent and characteristics of the coastal environment is provided in the NZCPS 2010 implementation guidance.

Policy 6 of the <u>NZCPS 2010</u> directs decision makers to consider certain matters in relation to activities affecting the coastal environment and the coastal marine area, including consideration of:

- the appropriateness of an activity
- the functional need for activities to be in the coast
- the reasonably foreseeable need of communities and future generations
- ensuring activities are appropriately located
- promotion of the efficient use of occupied space.



The <u>NZCPS 2010 implementation guidance</u> provides useful information on how to manage and plan for competing activities on the coast.

Managing the use of coastal space

There are many activities that occur within the coastal environment including urban and rural development, transport, infrastructure, energy generation and transmission, food production and mineral extraction. Land on the coast is often limited. There is the potential to have incompatible activities adjacent to each other. Decisions made about coastal land development can also impact on the coastal marine area. Coastal development is a significant issue for the sustainable management of New Zealand's coastal environment. The <u>NZCPS 2010</u> provides policy direction on the future allocation and use of the coast.

The mix of coastal uses can impact on people's lives and values and presents many planning issues. For example buildings, structures, infrastructure and other activities may affect public access and use or impact on recreational and amenity values others have for the same environment and these things have flow-on effects into the coastal marine area. Territorial authorities can require provision of esplanades (either strips or reserves) to help maintain public access to the coastal marine area. Further information on esplanades is available in the Esplanade Areas guidance material.

Coastal development may result in conflicts between uses and activities. Not all uses of the coastal environment are compatible. For example, traditional swimming areas may be made unsafe by adverse impacts such as the discharge of contaminants and other recreational activities such as jet skiing and surfing. Coastal space needs to be managed so that conflicts are avoided or minimised, amenity values are maintained and enhanced, and safety and navigation requirements are met. Managing conflict will often involve determining what activity takes priority in certain areas.

There are activities that have a functional need to be on the coast such as ports, marine aquaculture and marine energy. Such activities can contribute a lot to communities as long as they are located and managed appropriately. The NZCPS 2010 provides direction for decision making on the management of activities with a functional need to be in the coast, including policies 6, 8 and 9.

Cross-boundary issues

Many coastal structures cross the mean high water springs boundary and cross the jurisdictional boundary between regional and territorial authorities. For example, jetties are usually located both on land and within the coastal marine area to provide easy access to the coast. Integrated management is necessary to manage cross-boundary issues and the effects of the occupation of these types of structures or facilities within the coastal environment.

Effects of activities on tangata whenua values

New and existing coastal developments can adversely impact on the special relationship of tangata whenua with the coast. Tangata whenua can lose access to cultural resources (physical access and ability to harvest resources). Coastal development can result in increased competition for resources valued by tangata whenua for customary use (eg, kaimoana).



Demand for space for temporary activities and events

There are frequent demands to exclusively use parts of the coastal marine area for temporary periods to hold organised activities and events. These events may be public (eg, horse racing on Castlepoint Beach in Wairarapa) or private and require full restriction of public access (eg, filming on beaches). Public activities are generally perceived to be acceptable, as many people participate in or observe such events. Other events, such as surf lifesaving competitions have no option but to take place on the beach and restrict public access to some degree. As coastal settlements grow, temporary events that restrict public from parts of the coastal environment may become less acceptable and have more limitations, especially private events.

Protecting indigenous coastal biodiversity

In this guidance note 'biodiversity' is used as shorthand for the term 'biological diversity' which is defined in the RMA. New Zealand's indigenous coastal biodiversity includes the flora and fauna that naturally occur in our land, fresh water and/or marine environments. The impacts of coastal development on terrestrial biodiversity are reasonably well known, but there is less detailed information on the impacts on fresh water and marine habitats. The extent and rate of the loss of biodiversity is a significant resource management issue because the coastal biodiversity that remains is important. Biodiversity considerations are an integral part of managing landscapes, natural character and recognising and providing for tangata whenua's relationship with the coast.

All councils have the function of maintaining indigenous biodiversity, including coastal biodiversity, under sections 30 and section 31 of the RMA. Councils are also required to recognise and provide for the protection of significant indigenous vegetation and significant habitats of indigenous fauna, as a matter of national importance under s6(c). There needs to be integrated management of protection under the RMA and other statutory mechanisms.

Policy 11 of the NZCPS 2010 seeks to protect indigenous biological diversity in the coastal environment. The policy direction for protection involves: avoiding all adverse effects; avoiding significant adverse effects; or avoiding, remedying or mitigating other adverse effects; depending on the value or how vulnerable a species or ecological community type is. This two tiered approach for protecting indigenous biodiversity includes:

- Providing the highest level of protection for the indigenous biodiversity that is most at risk from irreversible loss; so avoiding adverse effects on this indigenous coastal biodiversity.
- A lower level of protection for more common or less at risk indigenous coastal biodiversity.

Policy 11 provides some guidance on a wide range of native biodiversity to protect.

Policy 12 of the NZCPS 2010 seeks to provide for the control of activities that could cause the release or spread of harmful aquatic organisms into the coastal environment, and manage the risk of such adverse effects occurring. The policy includes a list of activities that may cause the release or spread of harmful aquatic organisms. Harmful aquatic organisms can impact negatively on our coastal biodiversity, community use and enjoyment, and activities such as aquaculture.



For further guidance on biodiversity see the <u>NZCPS Implementation guidance</u>, the <u>Indigenous Biodiversity Guidance Note</u> and <u>Statement of National Priorities for Protecting</u> <u>Rare and Threatened Native Biodiversity on Private Land</u>.

Impacts on coastal biodiversity from land development

Biodiversity on the coast can be vulnerable to the impacts of existing and new coastal land development, for example discharges from urbanised areas of the coast, reclamations, structures and disturbance to physical processes. Particular effects on marine biodiversity from coastal land development can include:

- destruction and disturbance of foreshore and seabed and other coastal habitats through reclamations, structures, vegetation clearance, and harvesting
- sedimentation, contamination and eutrophication of coastal waters including estuaries, harbours, coastal lakes from point and non-point source discharges
- the introduction and spread of exotic plants, domestic animals and pests in the coastal environment associated with increasing activities on the coast
- increased harvesting of kaimoana species with increased coastal subdivision and development.
- the impacts of climate change. New pest species are likely to occur as a result of climate change
- migratory species are vulnerable to loss of any of the habitats they require, and/or obstructions along their migratory route

Fragmentation and displacement of coastal biodiversity

Ecological linkages with other areas are important for indigenous coastal biodiversity. Coastal development can result in increased fragmentation of natural habitats through damage or removal of vegetation, particularly in areas of sensitive dune and wetland vegetation. Coastal development impacts such as the removal of vegetation, increased foot traffic and vehicles, local weed infestations and the introduction of domestic animals may also result in the disturbance, destruction or displacement of coastal fauna. Migratory species are vulnerable to the loss of habitats that they require and any obstructions to their migratory route.

Lack of knowledge about coastal ecosystems and processes

Coastal land and waters involve complex ecosystems and processes. There is often a lack of knowledge about coastal ecosystems and processes and particularly what is happening in the marine component of the coastal environment. A number of matters can influence the marine environment, and for more complicated issues it can be difficult to trace the cause of observed changes. Information gaps about coastal biodiversity require carefully thought out approaches such as quantitative modelling and forecasting. For example hydrodynamic modelling has been used to gauge effects of nutrients from new salmon farms and forecasting has been used to calculate hazards risks and responses.

Marine reserves and other protection mechanisms can provide benchmark information about the state of marine biodiversity in the areas where they occur. Marine protected areas represent about 3 percent of New Zealand's marine environment. Practitioners often have to rely on localised assessments of marine biodiversity through resource consent applications. Characterisation reports prepared by community groups may also provide local assessments of marine biodiversity.



Harmful aquatic organisms

Various exotic species have been introduced into the coastal environment. The NZCPS 2010 Policy 12 focuses on harmful aquatic organisms. Dunes are susceptible to weed invasions from coastal development and estuarine and other coastal ecosystems can be threatened by the invasion of exotic species. Species can spread by vessels associated with increased coastal use and land development and the exchanging of ballast water, boat hull encrustations, and transport of equipment from one coastal area to another. Climate change can mean that new species occur in areas where they were previously absent and may impact on the coastal environment and indigenous biodiversity and other related coastal values.

Mangroves

The increase in sediment and nutrient discharges to the coastal marine area from coastal development has been identified as contributing to the accelerated growth of mangroves in many northern New Zealand harbours. Mangroves play an important role in coastal ecosystems by enhancing water quality, protecting coastal margins from erosion, and providing habitat for coastal flora and fauna. But the expansion of mangroves can lead to:

- rapid spread into non-vegetated coastal areas
- trapping sediments
- restricting access to beaches and recreation areas
- adverse impacts on amenity values.

Protecting biodiversity values important to tangata whenua

The impacts of coastal land development on indigenous biodiversity can be a significant issue for tangata whenua. Protecting biodiversity can help ensure the health and abundance of coastal resources such as kaimoana (seafood) and cultural materials such as taonga raranga (eg, pingao, a native sand sedge used in traditional cloaks and tukutuku), and helps to protect the mauri (life principle) of the coast.

Some coastal environments and associated biodiversity, such as particular dune systems, will have special significance to tangata whenua. It is important that the biodiversity of significance to tangata whenua is considered as well as general biodiversity value when managing the impacts from coastal development. Tangata whenua may also advocate that particular areas of indigenous biodiversity require enhancement to restore areas already degraded.

Preserving the natural character of the coastal environment

New Zealanders have a strong affinity for the natural character of our coast. Natural character comprises the living and non-living elements and patterns and processes that are natural to our coast.

Preserving the natural character of the coastal environment and protecting it from inappropriate subdivision, use and development is a matter of national importance under <u>s6(a)</u> of the RMA. Preserving indicates the need to maintain in the existing state. This presents a challenge for practitioners as subdivision, use and development can significantly change the character of the coast.



Natural character always exists to some degree in coastal areas and can vary on a spectrum from pristine and natural to highly modified environments. Some inappropriate coastal developments can adversely affect natural character even on a highly modified coast. Particular consideration needs to be given to protecting areas of unmodified natural character and avoiding cumulative effects on natural character arising from sprawling or sporadic subdivision.

Policy 13 of the NZCPS 2010 directs the preservation of the natural character of the coastal environment and its protection from inappropriate subdivision, use and development. This requires the natural character of the coastal environment to be assessed, at least areas of high natural character to be mapped or otherwise identified, and provisions to be included in statutory plans where necessary to preserve natural character. Policy 13(2) recognises that natural character occurs on a continuum and provides a list of matters that may be included, including biophysical and geological aspects, natural landforms and wild and scenic areas. The policy distinguishes between natural character, natural features and landscapes and amenity values.

Policy 14 of the NZCPS 2010 promotes the restoration of the natural character of the coastal environment through improved information and statutory provisions including consent conditions.

For further guidance on managing natural character see the <u>NZCPS Implementation</u> guidance and the Department of Conservation <u>natural character reports.</u>

Defining 'natural character'

One of the challenges of preserving the natural character of the coast is defining what it means in a particular location. Although not defined in the RMA, natural character has been increasingly codified through the Courts and the <u>NZCPS 2010</u>. The meaning of words in s6(a) of the RMA, such as 'preservation', 'protection' and 'inappropriate', require consideration and judgement in relation to the circumstances of the case and consideration of the sustainable management purpose of the RMA.

Natural character is the term used to describe the natural elements of all coastal environments. The degree or level of natural character depends on:

- 1. The extent to which the natural elements, patterns and processes occur (refer to the attributes included in Policy 13(2) of the NZCPS 2010);
- 2. The nature and extent of modification to ecosystems and landscape/seascape;
- 3. The degree of natural character (greatest naturalness) occurs 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.

This definition of natural character was endorsed by a workshop of practitioners hosted by the Department of Conservation on 2 August 2011 and was sourced from the Ministry for the Environment Environmental Performance Indicators Natural Character Workshop held in 2002 (with slight modifications).

Further discussion on natural character is provided in the <u>Department of Conservation</u> <u>August 2011 report on natural character</u>.



Risk of incremental loss of natural character

The natural character of the coastal environment can be adversely affected through the effects of coastal subdivision, use and development. In the <u>Community Guide to Coastal</u> <u>Development under the RMA 1991</u>, the Environmental Defence Society outlines the following impacts that development can have on the natural character of the coast:

- modification of natural landforms through earthworks
- removal of indigenous vegetation
- destruction of important indigenous habitats such as wetlands, dunes and riparian margins
- disruption of natural drainage patterns
- disruption of natural coastal processes including through activities such as beach replenishment, reclamations and coastal structures
- increased sediment runoff from land clearance and earthworks
- buildings and structures which are singly or cumulatively visually intrusive or dominant within the landscape
- disrupting natural patterns through inappropriate landscaping and/or the planting of non-indigenous local species.

The extent to which development impacts on natural character will depend on how modified the environment currently is, and how well the development has been designed to accommodate elements of natural character (including coastal processes) and mitigate adverse impacts. The risk of incremental loss of natural character as a result of coastal land development and other activities in the coast is high.

Managing the cumulative effects of coastal development can be a significant issue once the precedent for development has been set. Where coastal development has resulted in a reduction in the degree of natural character this may result in that area being considered more appropriate for future concentration of development. It is important that plans have clear policies in place to avoid adverse cumulative effects.

Outstanding natural character

Some coastal areas will be identified as having outstanding natural character. These areas will require the greatest level of protection compared with areas where coastal natural character is already compromised, such as areas that are already highly dominated by structures, buildings or infrastructure.

Natural character assessment and mapping

While there is general agreement on the core elements of natural character, there is a high variability in the descriptive and evaluative methods used to manage it. Natural character may be mapped or identified and provided for in RPSs, plans and consents. There is a need for good information gathering and integrated and strategic thinking. Further information on natural character assessment is provided in the Department of Conservation <u>Natural Character and the NZCPS</u>, <u>August 2011 report</u> and the <u>Natural Character Marlborough Workshop</u>, <u>September 2011</u>.



Restoration of natural character

Practitioners will need to consider restoration and rehabilitation of natural character of areas, as required by Policy 14 of the NZCPS 2010. Practitioners will determine whether the adverse effects on natural character of the coastal environment from new and existing development can be remedied, mitigated or offset by restoration or rehabilitation. In already developed areas, restoration efforts will generally require the cooperation of landowners.

Protecting coastal landscapes

Coastal landscapes are important to New Zealanders. In some places natural features and coastal landscapes have been degraded and there has been incremental loss of them. Protecting outstanding natural features and landscapes from inappropriate subdivision, use or development is a matter of national importance under s6(b) of the RMA. Coastal landscapes often have features which make them outstanding. Many coastal landscapes are significant to tangata whenua.

Coastal development may modify coastal landscapes through the construction of roads, tracks, buildings and structures and associated earthworks and vegetation clearance. Coastal landscapes can be particularly vulnerable to impacts from coastal development due to the high visibility of these landscapes from the sea, foreshore and skylines.

Policy 15 of the NZCPS 2010 directs the protection of natural features and natural landscapes (including seascapes) of the coastal environment from inappropriate subdivision, use and development. Policy 15 promotes the identification of natural features and natural landscapes by local authorities as a basis for provisions in policy statements and plans. Landscape characterisation is identified as the preferred assessment method. The Policy sets out matters to have regard to when doing such landscape assessments.

The challenge for practitioners is to define and assess coastal landscapes and provide for their appropriate level of protection in RMA policies and plans. The Department of Conservation <u>NZCPS 2010 implementation guidance</u>, the Environmental Defence Society's publications <u>Landscape Planning Guide for Peri-Urban and Rural Areas</u> and <u>Community Guide to Landscape Protection under the RMA</u>, and the <u>Landscape Guidance</u> <u>Note</u> provide further guidance on protecting landscapes.

Identifying and assessing coastal landscapes

Identifying and articulating outstanding and other coastal landscapes can be challenging. There can be barriers to getting community acceptance of any associated regulatory provisions and there is no single agreed assessment methodology. Assessments are increasingly using expert peer review processes to ensure good practice.

The New Zealand Institute of Landscape Architects and the Environment Court have grouped landscape assessment criteria to identify three key categories of landscape attributes:



- 1. Biophysical elements, patterns and processes
- 2. Associative meanings and values including spiritual, cultural or social associations and
- 3. Sensory or perceptual associations.

Expert landscape assessments and a strategic planning approach can enable practitioners to protect coastal landscapes. Expert assessments by professionals such as landscape architects and landscape planners are usually area based or development proposal driven. Further information on landscape assessments is provided in the Landscape <u>Guidance Note</u>.

Managing development impacts on coastal landscapes

Coastal land development has the potential to significantly impact on coastal landscapes and natural character by changing the naturalness of an area, and the visual, cultural and amenity values associated with the coastal landscape.

New and existing coastal development can be designed and located to minimise adverse effects on landscape and natural features. The challenge for practitioners is to ensure that RMA planning documents reflect the direction of the NZCPS 2010 and section 6 of the RMA by avoiding the adverse impacts of development on coastal landscapes while still allowing for appropriate development in locations where development is considered appropriate (refer to the policy direction in Policy 6(1) of the NZCPS 2010).

Policy 15 of the NZCPS provides direction to practitioners. Adverse effects of activities on areas of outstanding natural features and landscapes are to be avoided and significant adverse effects are to be avoided. All other effects are to be avoided, remedied or mitigated.

Impact on landscapes when viewed from land and sea

Coastal landscape views from land and sea can be adversely affected by the individual and cumulative effects of inappropriate subdivision, use or development. Coastal developments can be highly visible from the sea and impact on the quality of the visual landscape from the sea. Coastal development may be visible from land that is not directly adjacent (eg, other side of the harbour) and adversely impact on the coastal landscape. Practitioners need to consider landscapes in their entirety and their role within a wider coast. Where possible, practitioners should maintain and enhance the visual coastal landscape links between the coastal marine area and the landward coastal environment.

Importance of coastal landscapes for tangata whenua

Coastal landscapes are of particular importance to tangata whenua. This is reflected in Maori tradition and legends, including wahi ingoa (place names), purakau (traditional stories) and whakatauki (proverbs), and the exercise of customary activities.

Particular coastal landscapes may be identified as significant cultural landscapes by tangata whenua. Such landscapes may include concentrations of pa and wahi tapu sites. They may also include important pou whenua, such as rock formations, cliffs and trees that provide traditional markers within the environment. Other important aspects of coastal landscapes include view shafts to and from marae and the sea, the views of prominent headlands, and ara (trails). Changes to the coastal landscape as a result of



coastal land development can affect the relationship of Māori with ancestral lands, water, wahi tapu and wahi taonga.

Maintaining and enhancing public access

New Zealanders have a close association with the coast. The ability to access and enjoy the coast is a significant contributor to people's quality of life and sense of community well-being. The maintenance and enhancement of public access to and along the margins of the coast, rivers and other waterways is recognised as a matter of national importance in section 6(d) of the <u>RMA</u> and reflected in several policies of the <u>NZCPS 2010</u>. This includes providing for public open space and walking access in the coastal environment and recognising esplanade reserves or esplanade strips as a management tool. The <u>Esplanade Areas Guidance</u> provides additional information. The <u>Marine and Coastal Area</u> (<u>Takutai Moana</u>) Act 2011 promotes free public access in, on or over the entire common marine and coastal area. It also preserves and protects existing recreational fishing rights and navigation rights.

Policy 18 and Policy 6 (in particular clauses (1)(i) and (2)(b)) of the NZCPS 2010), promote the provision and enjoyment of public open space in and near the coastal marine area, including its waters. Linkages with natural character, natural features, natural landscapes and amenity values are also recognised to ensure the provision of open space is compatible with these other values. Esplanade reserves and strips are required to be recognised as a tool to help meet the need for public open space. Coastal processes and climate change are required to be considered so as not to compromise access to public open space.

Policy 19 of the NZCPS seeks to maintain and enhance public walking access to, along and adjacent to the coastal marine area. Restrictions on access are provided for only when necessary, where specified values are likely to be adversely affected.

Policy 20 of the NZCPS directs control of the use of vehicles on beaches, foreshore, seabed and adjacent public land where there is harm to particular values in the coastal environment. Vehicle use on beaches, foreshore, seabed and adjacent public land is not precluded by Policy 20. The policy seeks to provide for vehicle access where this is appropriate, for example for recreational purposes, when and where vehicle access will not cause adverse effects, and access for emergency vehicles.

Another relevant NZCPS 2010 policy is Policy 16 which seeks to protect nationally significant surf breaks, access to them, and their use and enjoyment.

Practitioners are required to maintain and enhance public access to and along the coastal marine area, where possible and to identify situations where public access to the coast is inappropriate (eg, for habitat protection, public safety and security amongst other things). The provision of public access in the coastal environment should be integrated with other methods including tools under the Local Government Act 2002. For further guidance on public access see the NZCPS Implementation guidance.

Loss of open space

Open space often makes a significant contribution to the public's sense of appreciation and direct experience of coastal places. Public open space should be maintained and enhanced where possible and is an important design consideration for coastal



subdivisions, uses or other developments. Good design includes thinking through how to integrate on-site management with the wider strategies and policy direction provided in district and regional plans. This can include considering how to provide for community values for open space.

Identifying opportunities to enhance public access

Undeveloped land in peri-urban and rural areas and redevelopment of urban coastal areas provides opportunities to enhance public access. Early planning for public access, such as establishing reserves and walkways, can provide links with open space planning for an area. Open space planning is important for coastal developments as these developments often result in a perceived loss of open space, even if open space was not available for public access prior to development (eg, farmland).

Maintaining public access

'Coastal squeeze' can impact on public access. 'Coastal squeeze' occurs where natural coastal features, habitats and ecosystems are 'squeezed' and can disappear, between the waves and an armoured shoreline (such as hard protection structures), especially when there is coastal erosion and/or sea level rise which causes the shoreline profile, and natural features to migrate inland. This can reduce, degrade or remove public access to and along the coast between mean low and high water springs. Esplanade areas are particularly important in these situations as they may be the only available high tide public access along the shore and provide a buffer during periods of erosion.

Situations where public access may be restricted

There are some sensitive areas within the coastal environment where there may be a need to restrict public access as coastal development occurs. Policy 19(3) of the NZCPS 2010 provides guidance on when it is appropriate to restrict public access and enforce any restrictions (eg, to protect marine biodiversity or cultural values). The <u>Coastal and Marine Area (Takuati Moana) Act 2011</u> also provides mechanisms to restrict public access in the common coastal marine area in certain circumstances.

Vehicles on beaches

Vehicles on beaches can have adverse impacts on some coastal values and other forms of public access (such as walking access). This issue is exacerbated by the inclusion of beaches within the definition of roads under the <u>Land Transport Act 1998</u>. Vehicles may disturb or possibly cause injury to people using beaches, and can adversely impact on other amenity values due to their noise and visual impact. Vehicles can also cause significant damage to sensitive dune systems and coastal flora, and disrupt valuable mating, breeding, resting and nesting sites for indigenous bird species. Vehicles can disrupt and damage archaeological sites and wahi tapu and impact on cultural values.

Effects of public access on tangata whenua values

Many issues associated with coastal public access are also of concern to tangata whenua. Adverse impacts on cultural values such as wahi tapu and wahi taonga can impact on tangata whenua and can disrupt customary practices. Policy 13(3)(c) of the NZCPS 2010 acknowledges that it may be appropriate to restrict public access in order to protect



Maori cultural values. Protecting such areas should be carried out in accordance with tikanga Maori.

Identifying and protecting coastal historic heritage

Coastal areas have been favoured places for settlement since humans arrived in New Zealand. Consequently much of the country's historic heritage is located within the coastal environment, both on land and within the coastal marine area. Examples of coastal historic heritage include landscapes (eg, Young Nicks Head in Gisborne), structures (eg, ship wrecks, lighthouses), places (eg, Ship Cove in Marlborough Sounds) and sites of significance to Maori (eg, wahi tapu, coastal pa) and other archaeological sites.

Policy 17 of the NZCPS seeks to protect historic heritage in the coastal environment from inappropriate subdivision, use, and development, and directs local authorities to identify and assess coastal historic sites in collaboration with others including iwi authorities and kaitiaki. The policy highlights that an integrated approach to managing historic heritage in the coastal environment is highly beneficial. Policy 2 of the NZCPS 2010 also has relevant provisions.

For further guidance on historic heritage see the <u>NZCPS Implementation guidance</u>. The <u>Historic Heritage Guidance Note</u> provides general guidance of relevance to protecting coastal heritage including identifying places, assessing heritage values and methods to protect historic heritage (such as the use of incentives, regulatory controls and mapping).

Identifying and protecting coastal historic heritage

The coastal environment contains rich historic heritage due to the historical predominance of settlements in coastal areas (both pre and post colonisation). There are many historic heritage sites and the key challenge for practitioners is how to identify and manage these, particularly if located in the coastal marine area. The difficulties arise when historic heritage sites within the coastal marine area are not readily visible (eg, a sunken shipwreck) or identifiable, are privately owned (eg, boatsheds), or are publicly used and have maintenance and safety issues (eg, jetties). The protection of archaeological sites in areas sensitive to development eg, dunes and harbour margins is also an issue.

Many coastal heritage sites and structures cross mean high water springs, meaning that both regional councils and territorial authorities are responsible for their protection, for example, wharves. This requires integrated management of coastal heritage. Some historic sites or structures can also raise issues for public safety.

Identifying and protecting wahi tapu and other taonga

Identifying and protecting wahi tapu and other taonga that contribute to coastal historic heritage can be a significant challenge for practitioners. Some wahi tapu within the coastal environment are well known, tangible and easy to identify (eg, registered New Zealand Archaeology Association sites). However, many wahi tapu are intangible or in undisclosed locations. Tangata whenua may consider that non-disclosure of the location of wahi tapu is a more effective means of protection for the item itself, or the mana associated with it, than through identification in planning processes. This can create uncertainty and may result in their accidental loss.



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Practitioners need to work closely with tangata whenua to find an appropriate means to identify and protect coastal wahi tapu and other taonga. The identification and protection of taonga in the coastal environment, such as places, sites or resources of significance (other than wahi tapu), may need to be incorporated through other provisions such as biodiversity, landscape and natural character provisions.

Managing water quality

Water quality is fundamental for coastal biodiversity, habitat and ecosystem health and for coastal activities such as swimming, fishing, marine farming and shellfish gathering.

Policy 21 of the NZCPS 2010, Enhancement of water quality, is the core policy about water quality. It sets the goal of improving water quality in the coastal environment where it has deteriorated and 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. This policy outlines the priority means of improving water quality, like what to include in resource management plans; restoring water quality so it can support activities, ecosystems and habitats; excluding stock; and engaging with tangata whenua to identify coastal waters of particular interest to them.

Policy 22 of the NZCPS 2010 directs the management and control of sedimentation in the coastal marine area.

Policy 23 NZCPS 2010 directs the management of contaminant discharges to water in the coastal environment. Policy 23 particularly discourages the discharge of human sewage in the coastal environment without treatment.

For further guidance on water quality see the Ministry for the Environment information on the <u>water quality</u> (including the <u>National Policy Statement for Freshwater Management</u> <u>2011</u>) and the <u>NZCPS Implementation guidance</u>.

Managing discharges

Existing and new coastal land development can have a significant impact on water quality and ecosystems in the coastal marine area if discharges to the coast are not well managed. Discharges may impact on the mauri (life essence or life-supporting capacity) of coastal water, coastal biodiversity, recreational activities, marine farming and the relationship that tangata whenua have with the coast. Discharges from coastal land development that impact on coastal water quality include things like sediment from vegetation clearance/earthworks (see the <u>Earthworks Guidance Note</u>) and heavy metals/toxins and agricultural run-off; wastewater, including sewage; and stormwater.

Discharges from coastal land development can be broadly categorised as being either point source discharges (from a discrete source) or non-point source discharges (from diffuse sources). Common examples of point source discharges include:

- stormwater from reticulated networks, runoff from roofs, roads and car parks
- wastewater containing community sewage older treatment systems may not have been designed to cope with development or seasonal influxes of visitors
- leachate from landfills and other contaminated sites
- industrial by-products, such as cooling water, and process chemicals



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• agricultural by-products, such as dairy shed effluent irrigation by-wash, such as canal and border-dyke return outlets.

Common examples of non-point source discharges include:

- irrigation or rainfall runoff from agricultural land containing contaminants such as fertiliser, animal faeces, and eroding soil
- runoff from horticultural land containing contaminants such as fertiliser, chemical sprays, and rotting produce
- runoff from forestry land containing contaminants such as eroding soil, chemical sprays, and debris
- runoff from mining areas containing contaminants such as eroding soil and rock
- stormwater from areas that are not reticulated.

Coastal land development can increase the amount of eroded sediment discharged into waterways and increase the amount of toxins in coastal waters through discharges from marinas and boat anti-fouling treatments and agricultural by-products, such as dairy shed effluent. Coastal water quality may be contaminated through hydrocarbons from the increasing number of vehicles operating within or near the coast. Toxins harm coastal biodiversity as they can accumulate in marine sediments and subsequently get released when the seabed is disturbed.

Wastewater treatment systems associated with new and existing coastal land uses require careful management in terms of their location, suitability and capacity. Nutrients from poor performing or poorly maintained wastewater treatment systems can discharge into the coast and have significant adverse effects on water quality.

Existing and new coastal land uses can result in an increase in contaminants being discharged in stormwater. Coastal development may also result in a concentration of stormwater in certain areas. For example, an increase in sealed access ways and carparks can inhibit the distribution of stormwater and concentrate discharges into runoff areas within the coastal environment. Careful planning is needed to maintain stormwater and sewage reticulation systems especially their capacity in extreme weather events.

Policy 23 of the NZCPS 2010 about the discharge of contaminants, including human sewage, provides a strong signal against discharges of untreated human sewage into water in the coastal environment. There is further <u>guidance on the Department of</u> <u>Conservation website regarding discharges of untreated human sewage</u>.

Sedimentation

Coastal developments, earthworks, vegetation clearance, and so on can result in increased sediment loadings discharging into coastal waters. Sedimentation comes from urban and rural land uses and impacts on ecological values. Sedimentation is a threat to inter-tidal waters, estuaries, wetlands and overall coastal water quality. It can smother benthic communities and significantly adversely affect natural habitats and ecosystems. Many iwi are finding it difficult to source their traditional mahinga kai resources due to sedimentation affecting their wetlands, estuaries and harbours.



Protecting the mauri of coastal waters

Water has high spiritual, social and cultural value to tangata whenua. Coastal water quality is important for the health of kaimoana and the mauri of the coastal environment. Coastal discharges can have adverse cultural impacts on tangata whenua, with associated impacts on customary values and uses of the coast such as contaminating areas valued for mahinga kai. Avoiding the direct discharge of contaminants into coastal waters is particularly important to tangata whenua. Discharge to land that does not exceed the carrying capacity of that land is often seen as the best option for avoiding impacts of discharges on the mauri of coastal waters.

Managing coastal hazards

Risks from coastal hazards are a widespread and national scale issue in New Zealand. The risks of harm could escalate unless action is taken to prevent the likelihood and consequences of coastal hazard events increasing in the future. Coastal erosion, coastal flooding, and tsunami are all natural coastal processes which become hazards where they pose a threat to human property and/or life. The risk from coastal hazards is being exacerbated by sea-level rise and other climate change related influences on land development at the coastal margins and from people protecting their property from coastal processes.

There is a risk-based approach to coastal hazard management in the <u>NZCPS 2010</u> (see policies 24-27). This reflects well-established international best practice for natural hazard management. This approach is reinforced by the requirement to apply a precautionary approach to address climate change and its uncertain, but potentially significant, adverse effects (NZCPS 2010, Policy 3). All coastal hazard policies flow from Objective 5 in the NZCPS 2010.

Policy 24 of the NZCPS 2010 lays the foundation for risk-based coastal hazard management. Hazard-prone coastal areas are to be identified, and the hazard risks in those areas comprehensively assessed. Priority is to be given to areas which have a high probability of being affected by coastal hazards. Hazard risks are to be assessed over at least 100 years, in order to provide the information necessary for sustainable management in accord with Policy 25 and Policy 27. Risk is defined as both likelihood and consequences, and the policy specifies both the hazard and development parameters that are to be considered as part of hazard risk assessments. National guidance and the best available information are to be used in these assessments.

Policy 25 of the NZCPS 2010 is the core policy on coastal hazards. It sets the goal of containing or reducing the risk of social, environmental and economic harm from those hazards. It also contains the more detailed policy related to redevelopment and changes in land use (which includes new development), and some of the more general policy on infrastructure, hard protection structures, and tsunami.

Policy 26 of the NZCPS 2010 seeks the protection, restoration or enhancement of natural defences as a preferred way to protect the full range of coastal uses and values from coastal hazards.

For hazard-prone coastal areas where there is already significant existing development, Policy 27 of the NZCPS 2010 sets out a range of options that should be assessed for



reducing coastal hazard risk. The policy then gives direction on the evaluation of those options.

Coastal hazards are also dealt with in Policy 3(2) of the NZCPS 2010 which specifically requires a precautionary approach for coastal resources potentially vulnerable to effects from climate change.

More detail on coastal hazards and climate change, and methods to avoid or reduce coastal hazard risk, can be found in the <u>NZCPS Implementation guidance</u>, <u>Coastal</u> <u>Adaptation to Climate Change</u>, <u>Pathways to Change</u>, <u>Coastal Hazards and Climate Change</u> <u>Manual</u> and <u>Natural Hazards Guidance</u>.

Protecting coastal assets

New Zealand has a long coastline and a lot of development has occurred in coastal areas, including in hazard-prone areas. Intensified coastal development a few decades ago has led to increased coastal property values. Coastal hazards pose a substantial risk of harm to coastal development. Coastal hazards can lead to economic, social and environmental harm, especially if inappropriate hazard responses are chosen.

Risk based management and the need for expert assessment of risk

Risk-based management is now the international norm for natural hazard management. It is particularly appropriate where both the likelihood and consequences of natural hazard events will potentially increase but there can be no certainty over how much they will increase. Coastal hazard assessments and precautionary risk-based management are complex, and both require good information and methodologies and will often involve experts. Harm can arise either from the coastal hazard events themselves or from the way that the community responds to the threat of coastal hazard events. Sustainable coastal hazard management is primarily the management of community responses to the threat of coastal hazard events.

Uncertainty over climate change effects

In future, accelerating climate change effects are likely to lead to more severe and extensive coastal hazards. There continues to be a lot of uncertainty over how severe climate change effects will be. It is possible that more severe wind and rain events will significantly worsen coastal hazards within a few generations. Adaptation to coastal hazards has substantial barriers, such as short-term adaptation costs; inadequate community awareness and understanding; uncertainty and skepticism; and a political reluctance to consider long-term timeframes. This makes it difficult to shift to a new paradigm for managing potentially hazard-prone coastal land.



Methods for managing coastal land development impacts

There are a range of different methods available for practitioners to manage the impacts of coastal land development. Methods can be statutory, non-statutory or a combination of both. Some statutory methods are also regulatory.

Statutory methods under the RMA

Regional policy statements

The purpose of regional policy statements (RPSs) is to provide an overview of the resource management issues of the region, and set out policies and methods to achieve the integrated management of the natural and physical resources of the region. RPSs are a key RMA instrument in achieving integrated management of the coastal environment as regional and district plans must give effect to RPSs.

The broad scope set out in s59-62 of the RMA provides the opportunity to strategically address coastal land development throughout the region by:

- providing a regional framework for the integrated management of coastal land development through the identification of issues, objectives, policies and methods that cross jurisdictional boundaries, and the processes to be used to deal with crossboundary issues
- providing an overview of the significant resource management issues in the region relating to coastal land development
- including resource management issues of significance to iwi authorities
- identifying regionally significant areas and features in the coastal environment that should be protected and provided for in regional and district plans
- setting out specific local authority roles and responsibilities for the control of the use of coastal land in relation to natural hazards, hazardous substances and biodiversity.

Regional coastal plans

Regional councils are required to prepare regional coastal plans under s64 of the RMA to achieve the purpose of the RMA in relation to the coastal marine area. Regional coastal plans are limited to managing effects within the coastal marine area. These plans are important for addressing the effects of activities in the coastal marine area associated with land development (eg, discharges and facilities such as jetties).

Regional plans (including regional coastal environment plans)

Regional councils may prepare regional plans under s65 of the RMA to help them carry out their regional functions. Importantly, section 64(2) of the RMA allows regional councils to incorporate a regional coastal plan into a regional plan "where it is considered appropriate in order to promote the integrated management of a coastal marine area and any related part of the coastal environment". These regional plans that apply to the wider coastal environment are often referred to as regional coastal environment plans.

As coastal land development issues are inextricably linked between land and the coastal marine area, regional plans that apply to the wider coastal environment (including the



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coastal marine area) offer a significant advantage to manage coastal land development impacts and promote integrated management.

Regional plans can also be developed to control the use of land above mean high water springs when considered appropriate to carry out the functions of the regional council in section 30(1)(c) of the RMA. Many of these functions are relevant to the management of coastal land development impacts such as discharges to air, land and water, biodiversity, and avoidance or mitigation of natural hazards. Other uses of coastal land are primarily controlled through district plans.

District plans

District plans help territorial authorities carry out their functions in order to achieve the purpose of the RMA, through the use of objectives, policies, and rules. District plans must also take into account iwi management plans. District plans may include a definition of the inland boundary of the coastal environment.

District plans may also use coastal zones to provide particular management of the coastal environment above mean high water springs. Zones and overlays on district plan maps help to identify the location of significant natural features, landscapes, heritage sites, hazard zones and other areas, and provide specific objectives, policies and rules to control the adverse effects of land development. Subdivision rules are an important control, as they influence the likely density (and associated effects) of development in the coastal environment.

District plans should aim to provide integrated management that recognises the connections between the various elements of the coastal environment, including significant landscapes, natural character and natural hazards.

The Environmental Defence Society's <u>Community Guide to Coastal Development</u> provides general guidance on objectives and policies that could be included in plans to manage the effects of coastal development.

Integrated coastal planning instruments

There is a growing trend towards having a "single plan" approach or more integrated and combined planning instruments. This may include incorporating a regional coastal plan into a regional plan that applies to the wider coastal environment (i.e. a regional plan: coastal environment or regional coastal environment plan); developing combined plans within one authority; developing combined plans between local authorities (such as in the Wairarapa); and developing complementary provisions in plans with a common boundary to address issues across the land/sea interface. Holding joint hearings and forums on resource consent applications can ensure that issues are dealt with in an integrated manner.

Esplanade reserves and areas

The RMA provides for esplanade reserves or strips through district plans or resource consents (see s229 RMA). Esplanade reserves are a useful method to maintain or enhance many coastal values including natural character, biodiversity, public access, and



amenity values. Esplanade reserves may also provide access to undertake customary activities and mitigate the effects of natural hazards.

Esplanade reserves have a fixed boundary which means that the area may be lost through coastal erosion. Esplanade strips differ in that they are created by instruments on the title of the land, remain in private ownership and have boundaries that move with any changes in the location of mean high water springs resulting from erosion or accretion. Esplanade strips may therefore have the advantage of maintaining access in the longer term where land is subject to erosion. For more information see Esplanade Area Guidance.

Resource consents

Most coastal developments will require resource consent before they can proceed (eg, subdivision, coastal structures, discharges and earthworks). Resource consents will often be required from both regional councils and territorial authorities, particularly where land development may impact on the coastal marine area. In these situations, each council should be aware of any related consent requirements and consider holding joint hearings on notified applications to ensure that an integrated approach is taken to address all the environmental effects arising from a proposal.

Any application for resource consent is required to include an assessment of the actual or potential effects of the development on the environment (AEE) as prescribed in the Schedule Four of the RMA. The resource consent process provides the opportunity for all actual and potential effects of coastal land development proposals to be identified and assessed. The assessment of resource consent applications should be guided by relevant objectives, policies and rules within regional and district plans and the regional policy statement.

Where approval is considered appropriate, the RMA allows any adverse effects to be remedied, avoided or mitigated through appropriate conditions of consent. Because a resource consent application is site-specific, it provides opportunities to focus on the specific attributes of the site and to tailor consent conditions to protect or enhance elements of the coastal environment such as public access, biodiversity, landscape or heritage features. Financial contributions can also be imposed as a consent condition to offset adverse environmental effects provided these are imposed in accordance with the relevant plan.

Many assessments of environmental effects will provide locally relevant information on the existing environment, such as natural character. These assessments may include information that may have been relatively unknown or un-researched in the past, on matters such as marine biodiversity. This information can then contribute to the knowledge base for future planning. Monitoring can also be required as a condition of resource consent to provide more information for assessing potential effects associated with future coastal development or coastal planning.

Assessment of environmental effects may include a cultural impact assessment. A <u>cultural impact assessment</u> provides local information on tangata whenua values and an assessment of the effects from a proposed development on those values.



Designations and heritage orders

Territorial authorities can designate and then acquire land for public open space purposes or as heritage precinct using powers under Part 8 of the Act. Details of the designation process can be found in the <u>Designations, Notices of Requirement and Outline Plans</u> guidance note. Detail on <u>historic heritage management</u> is also available.

Monitoring and reporting

The monitoring and reporting requirements for local authorities under s35 of the RMA are a useful tool for determining the issues and impacts associated with coastal land development, as well as monitoring the success of management methods to address those issues and impacts.

Policy 28 of the NZCPS 2010 requires the effectiveness of the NZCPS 2010 to be monitored and reviewed and specifies details of the matters to be covered and the timeframe for this to occur.

Delegations, transfers and joint management agreements

<u>Transfers and delegations</u> under s33 and 34 of the RMA can be used to transfer powers and delegate RMA functions. This can help with integrated management of coastal development across mean high water springs. It is important to consider the practical extent and effect of such delegations and that relevant plans and policies are integrated on these matters.

Sections 36B-E of the RMA provide for a local authority to enter into a joint management agreement with any public authority, including an iwi authority or group that represents hapu for the purposes of the RMA.

Statutory methods under other legislation

Long-term plans

Long-term plans are prepared by councils under the <u>Local Government Act 2002</u> and describe the communities' desired outcomes over at least a 10-year period. Long-term plans provide a good tool to identify community aspirations in relation to coastal land development. The community outcomes direct the annual planning and budgeting of the council.

The Long Term Plan does not override the provisions of RMA plans (or other statutory documents), nor is there a legal requirement that new plans and strategies that are adopted, while a Long Term Plan is in force, must conform to it. However, because the Long Term Plan records the outcomes identified by the community and describes how the local authority will contribute to these, it is expected that local authorities will use this process to inform other plans and strategies. See the <u>Relationship between the Local</u> <u>Government Act and RMA</u> for more information.



Triennial agreements

The Local Government Act 2002 (LGA) requires all councils within each region to agree on protocols for communication and coordination. Triennial agreements meet the requirements of the LGA and are a good method to assist with the integrated management of the coastal environment.

Bylaws

Under s145 and s146 of the Local Government Act 2002, territorial authorities can make bylaws for a number of purposes. This includes protecting the public from nuisance, for public health and safety reasons, and the management of infrastructure, reserves and recreational grounds. Consequently, bylaws are a useful way of managing some of the issues associated with coastal land development, both on land and in the coastal marine area (eg, navigation).

Bylaws can be used as an alternative to setting rules in a district plan. Bylaws have more limited rights of appeal and therefore provide greater certainty but less flexibility than RMA instruments. Permit and penalty processes made under bylaws can be simpler than resource consent processes, which makes bylaws useful to control short-term and temporary activities.

Reserves and parks planning

Reserve management plans and reserve acquisition plans are prepared under the <u>Reserves Act 1977</u> and are a useful way to establish and manage public spaces. Councils are required to prepare reserve management plans for every reserve they administer. These plans should address management issues specific to each particular reserve and park, and provide opportunities to maintain and enhance public access, open spaces and recreational opportunities. These plans should align with the communities' needs, demands and desires for reserve management.

Some councils prepare plans for the coastal reserves they administer. The <u>Hauraki Gulf</u> <u>Marine Park Act (2000)</u> has been specifically produced to achieve integrated management across land and sea, across statutes and agencies involved in managing this area. The Act aims to ensure the effects of coastal development on the Hauraki Gulf are given proper consideration and its life-supporting capacity is protected.

Non-statutory methods

Many non-statutory methods have aspects of regulatory control or may be incorporated into regulatory documents to provide stronger methods for implementation.

Strategies

Strategic documents such as growth, coastal and conservation management strategies (promoted and facilitated by DOC) are a useful method to provide a long-term direction for a particular area and may help achieve a 'vision' for the coastal environment. Strategies can provide a holistic approach to management and can recommend implementation measures that can involve changes to statutory documents such as



regional and district plans but have the disadvantage of being largely non-statutory. Any new RMA plan or plan change is still subject to the Schedule One of the RMA plan change process.

Strategies are a good mechanism for integrated management of coastal development issues and effects particularly when prepared jointly by the agencies responsible for managing the coastal environment. Strategies should be developed in consultation with the community to help achieve strong community buy-in to the vision and methods of implementation. Strategies may lead to the development of structure plans for implementation at the local level.

Structure plans

Structure plans seek to achieve the effective planning and management of growth by integrating the protection, use, management and development of land and resources within a particular area. Structure plans often have a broad physical plan (or map) that identifies areas of growth, protection, parks and infrastructure and community requirements over a long timeframe (usually 20 years). Structure plans are often used to implement the vision of a regional or district strategy at a local level.

Structure plans have the advantage of providing detailed information on how a specific area will be developed and can be used to provide for the holistic management of coastal development. Structure plans allow for the strategic consideration of all potential impacts of developing an area allowing methods to be developed in advance to mitigate those effects.

Like strategies, structure plans are generally developed as non-statutory documents and may lack 'teeth' when it comes to their implementation. However, many councils are now incorporating structure plans into district plans through the RMA plan change processes. These structure plans have the status of a rule in the plan.

Management plans

Management plans are usually prepared in response to a specific issue or for areas that are experiencing pressures and adverse effects from coastal land development. Management plans include reserve management plans, harbour management plans, coastal erosion management plans, coastal compartment management plans, asset management plans, catchment management plans, conservation, and biosecurity management plans.

Management plans are generally not statutory although they may be referred to in regulatory documents. Larger management plans often involve a number of agencies and can provide a useful tool for integrated management across jurisdictional boundaries.

Iwi management plans

An iwi management plan (IMP) is a term commonly applied to a resource management plan prepared by an iwi, iwi authority, runanga or hapu. An IMP identifies important issues to tangata whenua regarding the sustainable management of natural, physical and cultural resources of their rohe (territory). IMPs (also known as hapu environmental



management plans, or iwi planning documents) are expressions of kaitiakitanga, and consolidate tangata whenua knowledge on resources and resource management issues important to them.

Sections 61, 66 and 74 of the RMA require regional councils and territorial authorities to take into account any relevant planning document recognised by an iwi authority and lodged with the council when preparing or changing any RMA planning document.

As tangata whenua have a special interest in the coastal environment IMPs are useful to identify sites and places of cultural importance within the coastal environment and articulate the views of tangata whenua on coastal land use, subdivision and development. IMPs are also useful to help practitioners recognise and provide for tangata whenua values when developing coastal land development provisions in plans and may include specific information on how tangata whenua want to be involved in policy, planning and resource consent processes. Frequently Asked Questions on Iwi Management Plans provides more information on Iwi Management Plans.

Cultural Impact Assessments

A Cultural Impact Assessment (CIA) is a report documenting tangata whenua values, interests and associations with an area or a resource, and the potential impacts of a proposed activity on these. CIAs can facilitate meaningful and effective participation of tangata whenua when assessing the actual and potential effects of coastal development on cultural values. There is no statutory requirement for resource consent applicants or the consent authority to prepare or commission a CIA but they can help provide a full and accurate assessment of environmental effects.

CIA reports can be an excellent source of information on tangata whenua views on coastal development, and can provide guidance on how to recognise and provide for the special relationship of tangata whenua with the coastal environment. Further information is available in <u>Frequently Asked Questions about Cultural Impact Assessments</u>.

Public education

Public education is a useful mechanism to manage coastal land development because it can raise awareness of key issues and impacts. Effective education may result in community 'buy in' to implementation measures, 'empower' people to adopt better coastal management practices, and ultimately result in less intervention being required from local authorities. For example, education may encourage landowners to manage coastal hazard risk by dune planting and rehabilitation. Public education is also helpful to ensure people are aware of acceptable behaviour on public coastal land, such as not walking on sensitive dunes or driving on the beach.

Community approaches and joint initiatives

Community approaches and joint initiatives can be a useful "bottom-up" method to manage coastal development impacts. Many of these initiatives have been successfully implemented including dune care (coast care) groups that are driven by community participation, with help from local or central government.



THE RMA QUALITY PLANNING RESOURCE

Community and other relevant stakeholders can be encouraged to accept responsibility for environmental management issues, including developing and implementing appropriate management actions. Communities then take ownership of coastal management issues and statutory agencies can be less focused on regulation and more focused on facilitating the community stakeholders to take coastal management actions.

Technical assessments

Technical assessments can be undertaken to assess special features in the region or district such as outstanding and significant landscapes, natural character, biodiversity and ecological values, tidal and oceanic activity, or sites of importance to tangata whenua. These may also be undertaken to assess the values associated with a particular area that may be facing development pressures. These assessments are usually made into reports and the identified features and areas can subsequently be incorporated into regional or district plans through schedules, maps or zones.

Design guidelines

Design guides are a useful method to manage the specific effects from coastal land development and use. Design guidelines can manage the effects of coastal land development by requiring proposals to address the impacts on particular aspects of the coastal environment.

Land acquisition

Land that is not in public ownership may be acquired and set aside as a mechanism to maintain or enhance public access, natural character and open space in developing coastal areas. Although councils have the ability to acquire land through the Public Works Act 1981, councils very seldom use compulsory land acquisition. The favoured approach is to try to negotiate with landowners to obtain land, or obtain land, such as esplanade reserves, when considering subdivision proposals. Alternatively land can be designated as a reserve and then acquired. See the Esplanade Reserves, Esplanade Strips and Access Strips Guidance Note for more information.

Asset management plans

Asset management plans are developed to meet the functional requirements of assets and infrastructure. Usually prepared by local authorities and network utility providers, they specify levels of service and performance measures for infrastructure. Asset management plans may be used to plan for growth along the coast or pressures on infrastructure and discharges (eg, stormwater network). They can also be used to plan for recreational facilities near the coast such as boat ramps and reserves.

Financial incentives

Financial incentives are means of monetary support that encourage or motivate people to do certain things. Examples of financial incentives include the provision of funding for private protection or restoration works, such as heritage or biodiversity funds, and rates relief.













