275794 Redacted

Natural Character Assessment of the Bay of Plenty Coastal Environment

March 2012

Document Quality Assurance

This report has been prepared in accordance with Boffa Miskell quality assurance procedures, and has been reviewed and approved for release as set out below.

Bibliographic reference for citation:
Natural Character Assessment for the Bay of Plenty Coastal Environment. Report prepared by Boffa Miskell Limited for Bay of Plenty Regional Council.

Prepared by: s 7(2)(a) - Privacy
Boffa Miskell Limited

Peer reviewed by: s 7(2)(a) - Privacy
Director / Landscape Architect
Boffa Miskell Limited

Status: FINAL

Revision / version: 0 Issue date: 16th March 2012

Template revision: 20120217 1030

Cover photograph: Moutuhora (Whale Island), Rebecca Ryder, January 2012

Contents:

Executive Summary

This report is an assessment of natural character for the Bay of Plenty Coastal Environment and has been undertaken in order to meet the requirements of newly released New Zealand Coastal Policy Statement('NZCPS'). Policy 13 of the NZCPS 2010 gives effect to Section 6(b) of the Resource Management Act 1991.

The methodology for assessment of natural character has been developed from an extensive background of natural character assessment methodologies and workshops within and between organisations. Both ecological and landscape expertise were utilised within this assessment of natural character.

The focus for the Bay of Plenty Regional Council is to identify and map those areas with High and Outstanding Natural Character, in order to given effect to Policy 13 of the NZCPS. The purpose of identification of areas of high and outstanding natural character is for inclusion of the mapped areas and associated policies into a variation to the Regional Policy Statement. 2010.

Extending from Orokawa Bay to just beyond Cape Runaway the coastline is some 260km in length and comprises two large harbours, a number of estuaries and eight large rivers. Very little of the coastal environment remains unmodified through built development, urbanisation or agricultural land use. As a result there are very few areas within the coastal environment that are considered to be areas of Outstanding Natural Character, with the many of the Outstanding Natural Character areas being off shore islands.

Assessment of the coastal environment identified 28 coastal sectors. The sectors were assessed broadly for their natural character values and then where unique features were identified, sub sectors, or features, within the broader sector where identified. Some 39 areas of High Natural Character, 13 areas of Very High natural character and 7 areas of Outstanding Natural Character were identified.

Below: Tuhua (Mayor Island)

The Coastal Environment

The Bay of Plenty coastline forms a large indentation in the north eastern coast of New Zealand. Extending from Orokawa Bay to just beyond Cape Runaway the coastline is some 260km in length. It comprises two large harbours a number of significant estuaries and eight large rivers that traverse the coast.

The coastline is separated into two parts; the northern part comprising sandy embayments with extensive dune lands enclosed by rocky headlands anchoring and; the southern or eastern part comprising a distinctive rocky coastline with dramatic headlands and a rocky shoreline.

A number of large islands extend along the coastline which are mostly volcanic, both active and inactive. Of these Whakaari (White Island) is the most active volanic island followed by Moutuhora (Whale Island) and Tuhua (Mayor Island) is also a reknown volcanic island.

Unique to the coastline are the harbours and the large barrier island of Matakana Island. Matakana is a unique feature and is the largest of its kind in New Zealand. Matakana Island, along with Rangiwaea, Motuhoa, Motiti and Ohakana Islands comprise small settlements of residential and rural development.

Very little of the coastal environment remains unmodified, as a result of historical forest clearance, settlement patterns, rural farming practices and infrastructure. Pockets of unmodified areas are largely a result of inaccessibility or difficult terrain restricting the ability to develop the land.

Significant efforts have been made at local and regional levels to rehabilitate the coastal dune environment along with the rocky coastline. Orokawa Bay is an example of regenerating bush, where some 60 years earlier the headland was void of vegetation.

The dynamic processes of the coastal environment provide the ability for the natural character values to change over a period of time. The evaluation of Natural Character is taken at this point in time and it is expected to change over time and reevaluation in the future will be required to monitor the extent of change.

Right : Waihi Estuary, Little Waihi and Maketu Headland

Study Background

In November 2010 the Bay of Plenty Regional Council (BOPRC) engaged Boffa Miskell Ltd to undertake an assessment of the natural character of the coastal environment for the region. The request for mapping of Natural Character within the region is a direct resposne to the New Zealand Coastal Policy Statement 2010, in particular Policy 13.

The Coastal Environment was determined in a separate study undertaken in 2010 for the region. It is this coastal environment which has been assessed for its natural character values.

The Coastal Environment assessed for the region comprised two zones being the Zone of Coastal Dominance and Zone of Coastal Influence. The Region have mapped the Coastal Dominance Zone as the Coastal Environment which also includes the Coastal Marine Area and all islands, in their entirity.

The objective of the assesment of natural character was: *to assess the entire coastal environment and identify areas of high and outstanding natural character.*

In order to identify these areas the entire coastal environment was was assessed and evaluated as being either, Very Low, Low, Moderate, High and Very High, with Outstanding re-evaluating those areas that were Very High.

Coastal Zones

In order to describe and analyse the coastal environment several zones are identified. The Regional Council has mapped the *Zone of Coastal Dominance (Zone B)* where it applys, to the landward extent of the coastal environment. Seaward of this exists the *Active Coastal Zone (Zone A)* which comprises the Coastal Marine Area (CMA) and the Active Coastal Interface. This mainly comprises the sea, rocks and part of the beach up to mean high water springs (MHWS) and up to the CMA boundaries, where they reach upstream on rivers. Both of these zones form the Coastal Environment for the purposes of this assessment. *(Refer to Table 1 and Figure 1)*

The *Zone of Coastal Influence* or *Coastal Context Zone* is an area where coastal processes are not significant but form part of the coastal landscape . Together all of these zones are referred to as the *Coastal Landscape.* The table below and diagram across, detail the coastal environment in which natural character has been assessed.

The diversity of the coastal environment and the extent of development along the coast provides a number of examples of the different types of coastal environments. Whilst the Coastal Environment is mapped as being the landward extent and the Coastal Dominance Zone, the Natural Character mapping undertaken has given regard to the adjoining zones.

Zone A

This **Active Coastal Zone** includes the CMA and the Active Coastal Interface (ACI) The CMA includes the sea, rocks and part of the beach up to the mean high water spring (MHWS) mark and extends out to sea for twelve nautical miles. The ACI is where the sea is the dominant element and is the primary or significant influence on landform, vegetation, and perception. The ACI varies in width, but generally extends inland of the MHWS mark and comprises the inter-tidal area above MHWS, beaches, lagoons, estuaries and their margins, rocky peninsulas and coastal cliffs.

Zone B

The **Coastal Dominance Zone** generally includes the land up to the first coastal ridge or escarpment (with the width varying generally between 100m to 500m from the back of the beach within flat to gently undulating environments, although will extend further inland where the landscape becomes more complex, such as the Ohiwa harbour where this zone may extend inland for several kilometres). This zone is where coastal processes are dominant or significant and may include inland cliffs, settled (or modified) dune lands, farm land and coastal forests. Both zones contain and exhibit coastal processes, influences and qualities that are significant/dominant.

Zone C

Coastal Context Zone : This zone is where coastal processes inland of the Coastal Environment have an influencing presence on the landscape and would include developed back-dunes which no longer exhibit significant coastal processes, coastal plains, and containing hill-slopes. This zone generally extends some 1.5 to 2km inland (or where coastal influences have sufficiently diminished). It is also recognised that some activities occurring within this zone can significantly affect the coastal environment (Zones A and B) either perceptually or physically to varying degrees. The inland extent of Zone C is not mapped, as it falls outside of the Coastal Environment.

Table 1 - Coastal Environment Zones

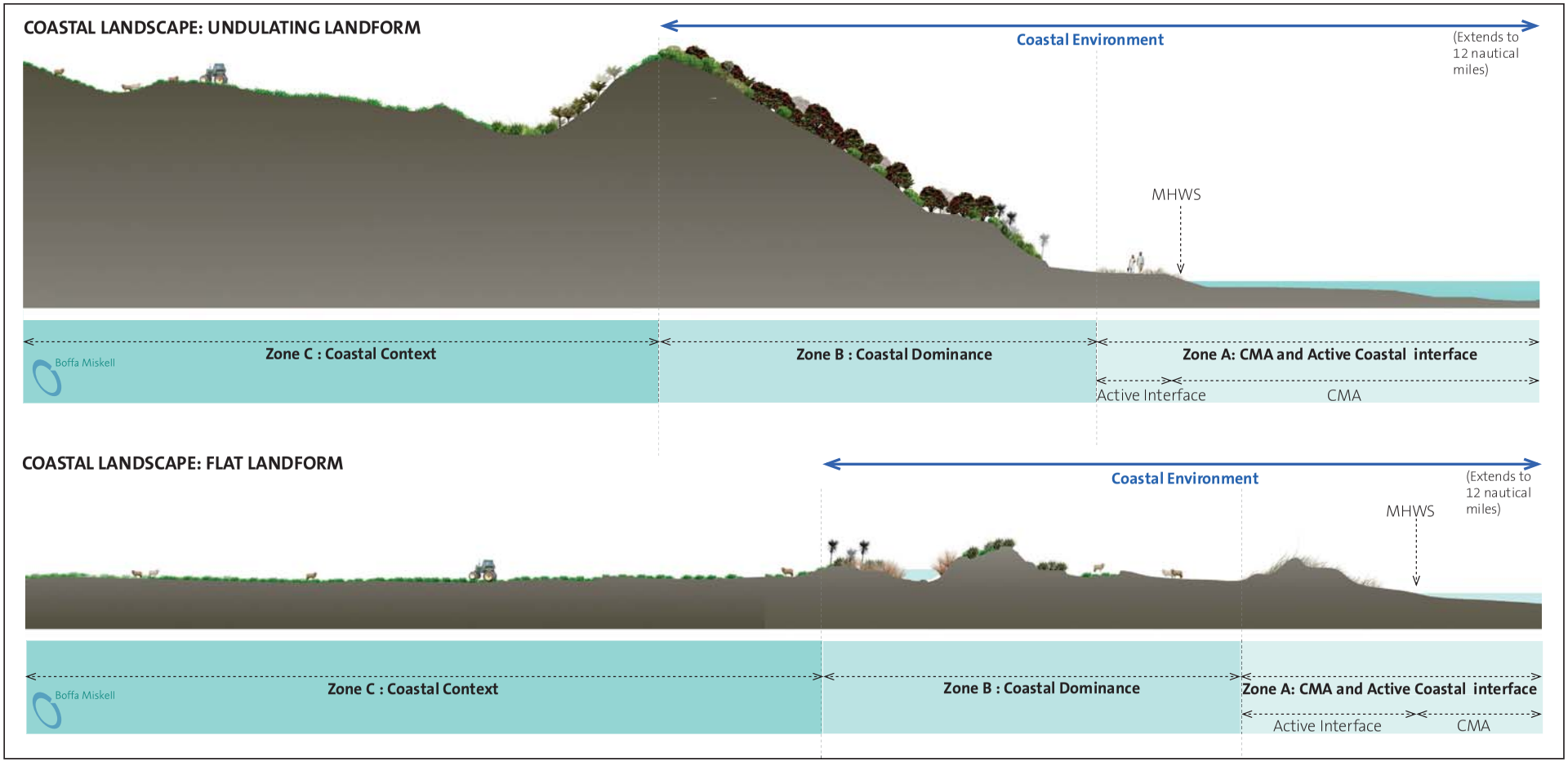


Figure 1 - Coastal Environment Zone Cross Section

Natural Character

This assessment is in response to the requirements of the New Zealand Coastal Policy Statement (NZCPS) 2010, which gives effect to Section 6(b) of the Resource Management Act 1991.

Section 6(b) states: *The pereservation of natural character of the coastal environment....and the protection of them from inappropraite subdivision, use and development.*

The environments with the greatest natural character are those devoid of human modification and are therefore entirely composed of natural elements appearing in natural patterns and underpinned by natural processes.

Natural character is not defined in the RMA or in the NZCPS 2010. There are various working definitions of the concept which are broadly similar and have been used in a number of Environment Court cases. Many are variations of a working definition of natural character that was developed by a number of landscape architects and other resource management practitioners for the Ministry for the Environment (MfE). This definition has commonly been considered useful and workable. This definition, which is used to describe the natural character of all coastal and riverine/ wetland environments states:

The degree or level of natural character within an area depends on:

1. *The extent to which natural elements, patterns and processes occur, and;*
2. *The nature and extent of modifications to the ecosystems and landscape/seascape.*

The highest degree of natural character (greatest naturalness) occurs where there is least modification. The effect of different types of modification upon the natural character of an area varies with the context, and may be perceived differently by different parts of the community.'

This interpretation is referenced to varying degrees in Policy 13 of the NZCPS 2010 and, in a recent workshop convened by the Department of Conservation (DOC), it was agreed that it is still relevant.

Within the 'Long Bay' Environment Court decision , the court built upon the 'Outstanding Natural Features and Landscape' definition of naturalness outlined within the 'Wakatipu Environmental Society Incorporated v Queenstown Lakes District Council' . Although specifically relating to 'natural' under Section 6b (of outstanding natural landscapes), paragraph 135 of the Long Bay decision states the following definition of 'natural':

Below: Coastline towards Potikirua Point

'The absence or compromised presence of one or more of these criteria does not mean that the landscape or coastal environment is non-natural, just that it is less natural. There is a spectrum of naturalness from a pristine natural landscape to a cityscape, and a 'cultured nature' landscape may still be an outstanding natural landscape.'

- 'relatively unmodified and legible physical landform and relief;
- the landscape being uncluttered by structures and/ or obvious human influence;
- the presence of water (lake, river, sea);
- the presence of vegetation (especially native vegetation) and other ecological patterns.'

Since the development of the MfE definition, and the 'Long Bay' decision, the NZCPS 2010 has come into effect which states (Policy 13) *that natural character may include:*

a. *natural elements, processes and patterns;*
b. *(biophysical, ecological, geological and geomorphological aspects;*
c. *natural landforms such as headlands, peninsulas, cliffs, dunes, wetlands, reefs, freshwater springs and surf breaks;*
d. *the natural movement of water and sediment;*
e. *the natural darkness of the night sky;*
f. *places or areas that are wild or scenic;*
g. *a range of natural character from pristine to modified; and*
h. *experiential attributes, including the sounds and smell of the sea; and their context or setting.*

Recognising a lack of guidance for the implementation/ interpretation of the NZCPS 2010, BML held a two-day in-house workshop in early 2011 to develop a consistent approach to natural character assessment and interpretation of NZCPS 2010 terms. At the BML 2011 workshop, it was evident that ecologists' and landscape architects' views of 'natural' and 'naturalness' are complementary yet sufficiently different to warrant further clarification.

Ecologists interpret natural character in terms of indigenous attributes, whereas landscape architects take a broader view that can encompass both indigenous and exotic natural attributes. Accordingly, the thresholds differ and a refined definition of 'naturalness' was agreed as being:

'A measure of the degree of human modification of a landscape/ seascape or ecosystem expressed in terms of:

i) Ecological naturalness (indigenous nature); and

ii) Landscape naturalness (perceptions of nature).'

The identification of natural character may require the views of terrestrial and marine ecologists or other natural scientists, as well as the views of landscape architects (planners).

Finally natural character occurs on a modification continuum and describes the expression of natural elements, patterns and processes (or the 'naturalness') in a landscape where the degree of 'naturalness' depends on:

- *The extent to which natural elements, patterns and processes occur and are legible;*
- *The nature and extent of human (or cultural) modifications to the landscape, seascape and ecosystems;*
- *The highest degree of natural character (greatest naturalness) occurs where there is least modification; and*
- *The degree of natural character is fluid and can change over time.*

Outstanding Natural Character

Under RMA s6(a) it is necessary to determine the existing attributes and extent of natural character and assess how these will be affected by a specific proposal. This approach is also required under the NZCPS 2010. However, Policy 13 of the NZCPS 2010 also specifically requires that an evaluation is made as to whether the natural character in the existing coastal environment is outstanding or not (in order to determine whether Policy 13(1)(a) or 13(1)(b) is triggered). Policy 13(1) of the NZCPS 2010 states:

'(1) To preserve the natural character of the coastal environment and to protect it from inappropriate subdivision, use and development:

(a) avoid adverse effects of activities on natural character in areas of the coastal environment with outstanding natural character; and

(b) avoid significant adverse effects and avoid, remedy or mitigate other adverse effects of activities on natural character in all other areas of the coastal environment;

An area with outstanding natural character may be an area within the coastal environment that is considered to have high or very high levels of natural character, although it is important to note that the high or very high ratings do not necessarily equate in themselves as 'outstanding'.

The following definitions were established and agreed at the BML 2011 internal workshop:

- *'Outstanding' is a comparative evaluative term meaning; to stand out, exceptional, pre-eminent, clearly superior to others in the same group or category.*
- *'Outstanding Natural Character': The coastal environment may be outstanding where it has high or very high levels of natural character.*

Outstanding natural character is assessed seperately. An assessment to establish whether a sector of the coastal environment contains outstanding natural character is undertaken only when all or part of the coastal sector, is initially assessed as containing 'high' or 'very high' levels of natural character.

For a coastal sector with 'high' or 'very high' levels of natural character to be considered 'outstanding', it must exhibit a combination of indigenous elements, patterns and processes that are exceptional in their extent, intactness, integrity, and a lack of built structures and other modifications compared to other areas in the Bay of Plenty Region.

In terms of mapping coastal areas of High, Very High and Outstanding Natural Character, some of these have been identified by their extent and may not necessarily conform to the whole coastal sector.

Below: Moturiki Island (Foreground) and Motutau Island

Method

The assessment of natural character within the region involved following a number of steps as below:

1. Collation of relevant GIS data, technical research, aerial photography. (Refer to Appendicies for relevant data)
2. Desktop analysis to determine the broad coastal sectors and broad natural character attributes based on desktop data.
3. Low level aerial reconnaissance and photography of the entire coastline and islands.
4. Refinement of coastal sectors and identification of outstanding natural character areas and features with high or very high ratings.
5. Project team assessment workshop and notation to determine the degree of natural character for each sector and area.
6. Mapping of boundaries.
7. Drafting of the assessment report.

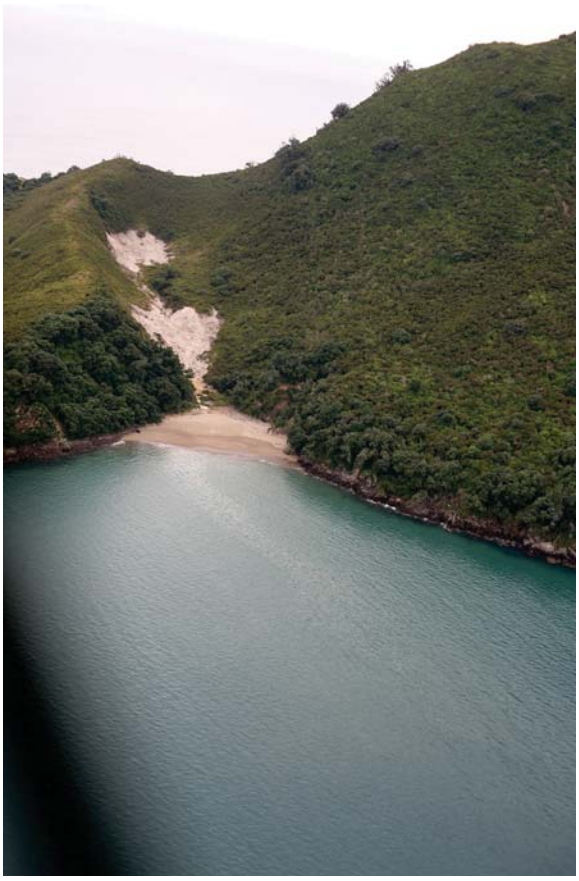
To define areas of natural character the Coastal Dominance Zone was defined into 28 sectors, within which a number of subsectors were identified. Generally within these broader sectors the coastal environment is largely of a similar landscape type, i.e. sandy coastline or rocky shoreline between key features.

For the harbours within the region, these have been identified as separate areas recognising the extensive saltmarsh, mangrove and small island habitats that exist. The open coast has been mapped within sectors to provide a 200m offshore buffer to take into account the intertidal coastline including sandy beaches and rocky coastlines.

Where there is a correlation between mapping features and no discernable boundary both the Significant Natural Areas or Outstanding Natural Landscapes or Features have been aligned to.

The following section of this report provides the detail on the degree of natural character for broad sectors whilst identifying highlighted features where the values are high, very high or areas that are outstanding.

The assessment of natural character along the coastal environment was completed on a five point scale with the extent of modification as being a key determinent of natural character:



Above: Volcanic crevass Moutohora Island (Whale Island)

- Very High (lowest amount of modification)
- High
- Moderate
- Low
- Very Low (greatest amount of modification)

Whilst Policy 13 requires at least areas of high natural character will be mapped, all five levels of natural character within the coastal sectors have been mapped, as well as the extent of Outstanding Natural Character Areas.

Scale

Natural character assessment is scale related, so that the coastal environment can be perceived as having different levels of natural character at different scales. For the purposes of this assessment, the scale assessed is at the regional level with a refinement in areas where the information has allowed The mapping scale for the sectors are at 1:50,000 scale with features identified at 1:10,000 scale and mapped on high resolution aerial photographs.

Attributes

In identifying the extent and level of modification to the natural elements, processes and patterns from which the key attributes have been considered. These attributes have been agreed upon with the Bay of Plenty Region and are identified to other Natural Character Studies including a pilot study for the Department of Conservation, undertaken for the Marlborough Region.

Water

(Zone A). Includes the water body of the CMA (including surf breaks) and landforms within the Active Coastal Interface and below MHWS (e.g. rocks, reefs, stacks, channels). Also includes habitats, biota and natural processes within Zone A. This excludes water-bodies above MHWS (or those contained within Zone B). Considers the degree of modification such as changed water courses, earthworks, presence of built structures, (moorings, jetties, marine farms, and navigation structures), and earthworks (dredging). This zone also includes any previously identified significant marine environments.

Abiotic Systems & Landform

[Zones A & B] Abiotic systems, including the degree of activeness of the tide, waves and currents as well as wind and terrestrial coastal formation, erosion, river mouth processes including sedimentation.

Landform above MHWS mark, Geomorphology, identification of different types of landforms and landforming processes (e.g. dunes, wetlands) and the physical modifications to these natural landforms above MHWS such as built structures, road cuts, earthworks and reclamation works.

Perceptual & experiential

[Zones A & B]. Natural attributes regarding the experience in seeing/feeling/ and perceiving the coastal environment. This includes aromas, aesthetics, auditory, sense of wildness, remoteness, isolation. Includes ephemeral human activity (such as recreation, commercial activities, fishing, marine farm servicing, diving, vehicles, machinery, horses, people, dogs, boats and jet skis).

Terrestrial & aquatic (Biotic Systems)

[Zone B]. This attribute includes estuaries, wetlands and terrestrial areas in Zone B and is assessed on ecological factors. Expression/appearance of natural ecological processes ranging from dominant to non-existent. Diversity of species, communities and habitat are also considered.

Land Cover & Land Use

[Zone B]. Land Cover and associated Land Use, including the composition, distribution, and condition of landcover including visible presence of indigenous/ exotic species. Biotic systems are outlined in a further attribute below. This attribute also includes settlements, roads and other built forms.

The above attributes have been assessed for each coastal sector and feature and considered as part of the Coastal Landscape Matrix (*Refer to Table 2)* . The degree of natural character for each coastal sector has been assessed based on an aggregation of the values.

Furthermore, Zone C has also been considered, acknowledging that elements within this zone can also affect the natural character of the coastal environment.

Below: Kaituna River and wetlands and Maketu Estuary

The Coastal Landscape Matrix

Degree of Natural Character	Zone A (CMA / Active Coastal interface)	Zones A and B CMA / Active Coastal Interface and Coastal Dominance Zone)		Zone B (Coastal Dominance Zone)		Zone C The Coastal Context Zone
	Natural Character Attributes					
	Water	Abiotic Systems / Landform	Perceptual / Experiential	Terrestrial Biotic Systems	Land Cover and Land Use	Descriptive text around elements that still may contain 'significant' aspects of the Coastal Environment but fall within the Coastal Context (Zone C)
Very High						
High						
Moderate						
Low						
Very Low						

Table 2 : Coastal Environment Matrix

The evaluation of natural character, within the following section, provides an overall assessment of broad sectors of the Coastal Dominance Zone. Assessment of features within a sector provides a further level of detail of more discrete components of the coastal environment that would otherwise be missed in a broadscale sector based approach. Commentry and recording of these features is only provided for those features where their overall rating is High, Very High or Outstanding. Individual features with a rating lower than high are not recorded.

For water bodies only the harbours and estuaries have been identified and assessed individually. The open coastal water has been broadly identified as being 'High'. Any modification to the open coastal waters with activities should consider the effects upon natural character with a consideration that the open coastal waters has high natural character.

The evaluation of each sector includes:

- A descriptor of each broad sector and some detail on specific elements within the feature,
- Evaluation of each of the attributes for the sector as a whole,
- Evaluation of attributes for the identified key features.
- Referencing of other relevant overlays relating to each broad sector comprising Outstanding Natural Features and Landscapes and Significant Ecological Areas.

Where no feature is recorded the term 'n/a = not applicable' is used.

Coastal Sector Evaluation

Coastal Sector 1: **Orokawa Bay to Rapatiotio Pt**

Orokawa Bay lies at the southern end of the Coromandel Peninsula. Covered in native coastal forest, species such as manuka, pohutukawa, puriri and nikau feature amongst the bush. Shrouded to the north and south in a steep rocky coastline the Bay comprises a wide sandy beach with a terraced bush edge. Two DOC campsites are located in open clearings and are accessible only by walking track from Waihi Beach. Much of the site is located within a 'Scenic Reserve'.

Below: Orokawa Bay looking north

Natural Character: **Very High**

Degree of Natural Character	Evaluation	Sector Rating	Feature Rating
Water	An open sandy bay with rocky headlands the water environment is unmodified. Two natural streams discharge across the beach to the coast with no outlet structures located along the beach.	Very High	n/a
Land Cover and Land Use	Contains a mixture of regenerating native coastal forest and remnant pohutukawa coastal forest. Access is limited to DOC walking tracks and the bay contains two camp sites. The beach system remains unmodified with a steep rocky coastline at either end, which extends northwards and southwards towards Waihi Beach.	Very High	n/a
Terrestrial Biotic Systems	Part of a larger forest feature, the coastal margin of the Orokawa Scenic Reserve consists of regenerating pohutukawa forest of national significance, modified by stands of invasive wilding pines. Although the feature has low diversity, it is in good condition and provides habitat for indigenous fauna and plants endemic to the Coromandel Ecological Region.	High	n/a
Abiotic System and Landform	Excellent example of natural processes with no modifications to the coastal processes.	Very High	n/a
Perceptual	Very low levels of activities, with few boats, very few people (pedestrian only) and no settlement.	Very High	n/a

Relevant Overlays (refer appx)	ONFL	SSCE	CHPZ
	1	none	60

Coastal Sector 2: **Waihi Beach to Bowentown Head**

Waihi Beach extends some 9km between Rapatiotio Point and the Bowentown Heads. Historically rear dune wetlands extended along this feature, however settlement patterns have altered the coastline. Some areas of the dune system are built right out to the frontal dune system whilst others are set back behind. In the settled areas the secondary and tertiary dune systems have been built upon. Extensive dune management continues with the Coast-Care program and recent works to stablise dune erosion through retaining walls and 'socks'. Parts of the Waiau River estuary have undergone reclamation to accomodate further development. Bowentown has a residential settlement and small commercial centre set behind the frontal dune system. The Bowentown heads form a striking landform that is regenerating in native bush. Rock caves are found on the remote coastal beach and Anzac Cover is a popular recreation destination for swimming and boating.

Top: Anzac Bay, Bowentown Heads

Bottom: View east along Waihi Beach from Orokawa Bay

Natural Character: **Moderate**

Natural Character Feature: Albacore Avenue to Bowentown Headland = High
Natural Character Feature: Bowentown Headland = High

Degree of Natural Character	Evaluation	Sector Rating	Feature Rating
Water	No physical modification to open coastal water body. High level of activity from surf club and recreational user activities (swimming, kayaking, boating etc)	Very High	Albacore Avenue to Bowentown Headland = High Bowentown Headland = High
Land Cover and Land Use	The extensive dune system is typically 2m wide in developed areas and 4m wide further south. Residential development and infrastructure for dune erosion has modified the coastline extensively. Dune restoration planting has provided improvement, but largely the frontal dune system is all that remains. Further south the dune system widens and the vegetation cover improves. Walking tracks access the foreshore with the main access road extending parrallel behind the secondary dune system. Largely in reserve land the natual regeneration of native plants has occurred along the dune and Bowentown heads.	Low to Moderate	Albacore Avenue to Bowentown Headland = High Bowentown Headland = High
Terrestrial Biotic Systems	Adjacent to the urban areas, the dunes are narrow, have low to moderate diversity, are highly modified by weed infestations, and provide limited habitat for indigenous species other than common species habituated to residential environments. Where the dunes extend across the tombolo and there is less or no encroachment from residences, dune vegetation has higher indigenous biodiversity of regional significance and provides habitat for threatened indigenous fauna, while retaining a strong component of exotic species. The mature and regenerating pohutukawa forest on the headland also has regional significance and provides habitat for uncommon indigenous plants and nesting sites for penguins, but is modified by weed infestations.	Moderate	Albacore Avenue to Bowentown Headland = High Bowentown Headland = High
Abiotic System and Landform	Limitations on the natural processes occuring with seawalls, dune protection measures and earthworks on the dunes. Coastal river patterns are channelled and contained. The Bowentown headlands and bar demonstrate highly natural processes occuring.	Moderate	Albacore Avenue to Bowentown Headland = High Bowentown Headland = High
Perceptual	Residential settlement dominates the northern and very southern ends of the beach. The southern area has limited use but still provides for recreational access. A high level of activity on the beach as it is a popular recreational destination for the community.	Moderate	Albacore Avenue to Bowentown Headland = High Bowentown Headland = High

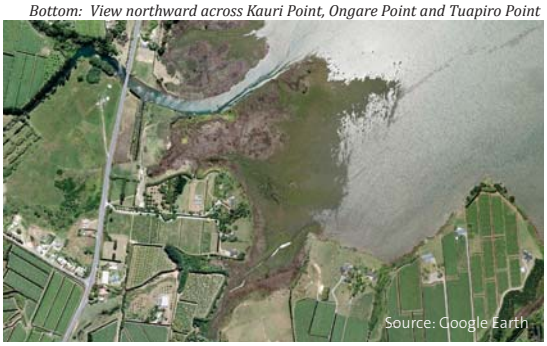
Relevant Overlays (refer appx)	ONFL	SSCE	CHPZ
	2	153	128, 65

Coastal Sector 3: **Bowentown to Kauri Pt**

The inner harbour edge, of Tauranga Harbour, is indented with a series of headlands, estuaries and embayments. Modification of this coastal edge has been extensive, with small residential settlements and farming land use right to the harbour edge. Small features within the harbour provide remnants of the coastal vegetation that once existed within the entire harbour. In many residential areas coastal erosion protection measures are present for protection of property and coastal walkways.

Top: Tanners Point Estuary

Bottom: View northward across Kauri Point, Ongare Point and Tuapiro Point



Natural Character: **Moderate**

Natural Character Feature: Tanners Point Estuary = High
Natural Character Feature: Ongare Point = High
Natural Character Feature: Kauri Point= High

Degree of Natural Character	Evaluation	Sector Rating	Feature Rating
Water	Clusters of moorings are located around Bowentown, Athenree, Tanners Point, Ongare Point and Kauri Point. Boat ramps providing tidal and deep water access are located at public and private locations along the harbour edge. Several jetty structures are located along the coast including at Tanners Point and Kauri Point.	Moderate to High	Tanners Point Estuary = High Ongare Point = High Kauri Point= High
Land Cover and Land Use	Residential settlements at Athenree, Tanners Point, Tuapiro Point, Ongare Point and Kauri Point create built clutter within the coastal landscape. Remnant pockets of native coastal pohutukawa remain. Farming of stock and horticulture extend right to the harbour edge with some remaining coastal vegetation.	Low to Moderate	Tanners Point Estuary = High Ongare Point = High Kauri Point= High
Terrestrial Biotic Systems	In most places the coastal margin is modified by residential, agricultural or horticultural development along with infrastructure and coastal erosion protection measures. Where vegetation is present it is generally small and fragmented, highly modified by land use, weed infestation and grazing. The Kauri Point pohutukawa forest has low diversity but is regionally significant.	Moderate	Tanners Point Estuary = High Ongare Point = High Kauri Point= High
Abiotic System and Landform	Limitations on the natural processes occuring within parts of the harbour with seawalls creating solid edges to the harbour, restricting natural erosion patterns.	Low to Moderate	Tanners Point Estuary = High Ongare Point = High Kauri Point= High
Perceptual	Moderate levels of activity on the harbour itself and the adjoining beachs, with Anzac Cove being a popular recreational destination. Other areas of popular activity at a local scale are Tanners Point, Tuapiro Point, Ongare Point and Kauri Point.	Moderate	Tanners Point Estuary = High Ongare Point = High Kauri Point= High

Relevant Overlays (refer appx)	ONFL	SSCE	CHPZ
	6, 7, 8	none	55

Coastal Sector 4: **Kauri Point to Omokoroa**

The inner harbour edge, of Tauranga Harbour, is indented with a series of headlands, estuaries and embayments. Modification of this coastal edge has been extensive, with the residential settlement of Katikati and farming land use right to the harbour edge. Small features within the harbour provide remnants of the coastal vegetation that once existed within the entire harbour. In many residential areas coastal erosion protection measures are present for protection of property and coastal walkways.

Top: Matahui Road Peninsula

Bottom: Turners Road Estuary

Natural Character: **Moderate**

Degree of Natural Character	Evaluation	Sector Rating	Feature Rating
Water	Clusters of moorings are located around the Uretara River mouth, Pahoia peninsula and Omokoroa. Boat ramps providing tidal and deep water access are located at public and private locations along the harbour edge, including Beach Road and Pahoia Road.	High	n/a
Land Cover and Land Use	Residential settlements at Katikati, Sharp Road, Pahoia and Omokoroa create built clutter within the coastal landscape. Remnant pockets of native coastal pohutukawa remain. / Farming of stock and horticulture extend right to the harbour edge and within the historical harbour environment with some remaining coastal vegetation.	Low	n/a
Terrestrial Biotic Systems	In most places the coastal margin is modified by residential, agricultural or horticultural development along with infrastructure and coastal erosion protection measures. Where vegetation is present it is generally small and fragmented, highly modified by land use, weed infestation and grazing. The Apata and Waipapa estuaries have, respectively, moderate and high diversity with regional significance supporting a range of indigenous threatened and uncommon saltmarsh bird species with some modification from weed infestation.	Low to Moderate	n/a
Abiotic System and Landform	Limitations on the natural processes occuring within parts of the harbour with seawalls creating solid edges to the harbour, restricting natural erosion patterns.	Moderate	n/a
Perceptual	Low to moderate levels of of activity on the harbour itself and the adjoining beachs, with Katikati and Pahoia beaches providing popular locations for recreation.	Moderate	n/a

Relevant Overlays (refer appx)	ONFL	SSCE	CHPZ
	none	92, 108	131

Coastal Sector 5: **Omokoroa to Waikareao**

This southern portion of the Tauranga Harbour displays a similar indented coastline with a series of headlands, estuaries and embayments. The southern end of the Tauranga Harbour displays intensive residential development that creates visual clutter amongst the coastal environment, affecting the day and night time visual experiences of the landscape. The embayments of Omokoroa, Te Puna and the Wairoa River display some higher levels of natural character, however much of the coastline has been significantly modified through land use change.

Above: Matua Saltmarsh

Below: Matua Peninsula , viewed from Bethlehem

Natural Character: **Moderate**

Degree of Natural Character	Evaluation	Sector Rating	Feature Rating
Water	A significant cluster of moorings, boat ramps and a ferry terminal are located at Omokoroa. Boat ramps providing tidal and deep water access are located at public and private locations along the harbour edge including Omokoroa Road and Te Puna. Modification to the waterways meeting the coast edge has occurred through channelling and stock banks along the Wairoa River and Waikareao Estuary	Moderate	n/a
Land Cover and Land Use	Residential settlement becomes dense along the coastal edge, with Omokoroa, Te Puna, Bethlehem and Matua and other suburbs of Tauranga City. Scatterings of pohutukawa are located along the coastal edge along with native bush. Parts of the city coastal landscape comprise a reduced density and remnant and rengerating native bush.	Low	n/a
Terrestrial Biotic Systems	In most places the coastal margin is modified by residential, agricultural or horticultural development along with infrastructure and coastal erosion protection measures. Where vegetation is present it is generally small and fragmented, highly modified by land use, weed infestation and grazing.	Moderate	n/a
Abiotic System and Landform	Limitations on the natural processes occuring within parts of the harbour with seawalls creating solid edges to the harbour, restricting natural erosion patterns. The Wairoa River coastal end comprises natural processes, but with some stop banks and retaining structures. Retaining around the city harbour edge is significant with rock walls, rip rap and retaining walls.	Moderate	n/a
Perceptual	Significant number of people utilise and live within this coastal sector. Residential settlements of Omokoroa, Te Puna and Tauranga City create a busy coastal environment. Buildings dominate the coastal environment apart from small pockets around Te Puna and the Wairoa River.	Moderate	n/a

Relevant Overlays (refer appx)	ONFL	SSCE	CHPZ
	none	155, 22, 17, 15	none

Coastal Sector 6: **Tauranga City to Mauao**

Of the Bay of Plenty Coastal Environment, Tauranga City has undergone the most significant and dramatic change to the natural environment. Built form dominates the coastal edge, with high rise, port activities and suburban residential settlement. Reclamation has been extensive at Sulphur Point, Tauranga CBD, Salisbury Wharf, Tauranga Bridge, Matapihi Bridge, Harini Bridge and Maungatapu Bridge. Much of the harbour coastline differs from its natural form and small pockets of remnant harbour edge are found wihtin the upper reaches of the four estuaries.

Top: Residential development on the harbour margin, adajcent to Memorial Park

Bottom: Mount Maungauni and Port of Tauranga

Natural Character: **Low - Moderate**

Degree of Natural Character	Evaluation	Sector Rating	Feature Rating
Water	Significant modification to the waterways entering the harbour through the coastal environment have occurred. Rivers and streams are channelled, dredged and piped. Stormwater outlets dominate the coastal edge along with the port wharf structures, seawalls, jetties and boat ramps. There is a high level of recreational use of the water environment through boating and passive recreational activities.	Very Low to Low	n/a
Land Cover and Land Use	Significant change has occurred to the CBD and Port area of Tauranga City through reclamation. The coastal landscape is dominated by built form and pockets of remnant coastal vegetation are located on cultural landscape sites. The southern harbour estuaries comprise less modification to the coastal environment, apart from the continuation of residential subdivision and rural agricultural and horticultural practices.	Very Low to Low	n/a
Terrestrial Biotic Systems	In most places the coastal margin is modified by residential, commercial, industrial or horticultural development along with infrastructure and coastal erosion protection measures. Where vegetation is present it is generally highly modified by land use and weed infestation. The Poike saltmarsh and wetlands and adjacentWaimapu River mouth saltmarsh have, respectively, moderate and high diversity with regional and national significance supporting several indigenous saltmarsh bird species. Both features are modified by weed infestations.	Low to Moderate	n/a
Abiotic System and Landform	Significant modification to the natural processes with reclamation creating narrowed harbour channels at Sulphur Point, Tauranga Bridge Marina, Matapihi Rail Bridge, Hairini Bridge and Maungatapu bridge. All have abutments which extend significantly into the harbour. Similarly Pilot Bay beach is less than half of its natural length due to reclamation for the port and industrial activities.	Low	n/a
Perceptual	Built form dominates the coastal environment with recreation of the coast prolific. Ferry services, shipping, recreational boating, wind powered sports and beach activities dominate this coastline	Moderate	n/a

Relevant Overlays (refer appx)	ONFL	SSCE	CHPZ
	none	76, 29, 75, 30, 174, 27, 138, 25	none

Coastal Sector 7: Mauao to Maketu

Mauao remains as a dominant feature in the coastal environment. Vegetation patterns have been modified significantly over the years with remnant Pohutukawa remaining on the lower base track area. Wild fires, historical grazing, settlement and infrastructure have been a significant alteration to the feature. However the coastal edge remains intact and vegetation patterns are improving through replanting programs. The Mount to Kaituna dunelands are a contingous system that has been heavily modified at the Mount Main Beach, built upon for most part of the residential areas and modified behind for further residential settlement. Small pockets of unmodifed primary and secondary dune systems are found within some maori and publicly owned land. Te Tumu provides an indicator of the dune patterns once found within Papamoa, prior to residential development. The Kaituna River mouth originally exited at the Maketu Harbour mouth and seawalls and retaining are present to manage erosion and water flow into the estuary, at the river cut. The Kaituna wetland is a remnant feature of the wider wetland that once extended immediatley behind the dune environment in this area.

Above and Bottom: Papamoa Dune Lands

Natural Character: **Moderate**

Natural Character Feature: Mauao = High
Natural Character Feature: Papamoa Dunes = High
Natural Character Feature: Kaituna River = High
Natural Character Feature: Maketu Estuary = High

Degree of Natural Character	Evaluation	Sector Rating	Feature Rating
Water	Minimal modification has occurred along the coastal edge, exlcuding immediately around Mauao where the shipping channel is located. Abutments and training walls are located around Mauao and dredging occurs. Shipping activity is apparent along the coastal environment here, along with recreational surf and ocean related activities.	Mod	Mauao = High Pap. Dunes = High Kaituna River = High Maketu Est. = High
Land Cover and Land Use	Mauao has undergone significant modification through pre european settlement, european settlement and practices. Since becoming a reserve the feature has improved its native vegetation cover. Tracks and structures (water reservoir and light house) also detail the modification to the site. The coastal dune lands to Maketu have significant modification and vary in width from 5m to 4m. Further east the dune lands become less modified. The Kaituna River comprises a distinctive rear coastal wetland. Landuse along the coastal edge comprises a mixture of farming and large lot residential (Maketu).	Low to Mod.	Mauao = High Pap. Dunes = High Kaituna River = High Maketu Est.= High
Terrestrial Biotic Systems	Adjacent to urban areas, the dunes are narrow, have low to moderate diversity, are highly modified by weed infestations, and provide limited habitat for indigenous species other than common species habituated to residential environments. Where the dunes extend across a wider area and there is less encroachment from residences, dune vegetation has higher indigenous biodiversity of regional significance and provides habitat for threatened indigenous fauna, while retaining a component of exotic species. The mature and regenerating pohutukawa forest on Mauao also has regional or national significance and provides habitat for threatened and uncommon indigenous plants and seabirds, but is modified by weed infestations, fire, slope stabiliasation, tracks and disturbance associated with recreational use. The Kaituna River wetlands have moderate diversity, are modified by weed infestations, and provide habitat for a range of indigenous wetland fish and bird species. The Maketu estuary, spit, dunelands and saltmarshes have moderate to high diversity with regional significance, are modified by weed infestations, and provide habitat for a very high diversity of indigenous fauna species, notably wading birds.	Mod. to High	Mauao = High Pap. Dunes = High Kaituna River = High Maketu Est. = High
Abiotic System and Landform	Parts are highly natural with unmodified dune processes occuring. Residential areas have modified and manage dune processes. Similarly the forestry at Te Tumu modifies the coastal processes. The Kaituna River and Maketu Estuary have been significantly modified and channelled.	Mod. to High	Mauao = High Pap. Dunes = High Kaituna River = Mod. Maketu Est = Mod..
Perceptual	Built form dominates the coastal environment with recreation of the coast comprising shipping, recreational boating, wind powered sports and beach activities.	Mod.	Mauao = High Pap. Dunes = High Kaituna River = Mod. Maketu Est. = Mod.

Relevant Overlays (refer appx)	ONFL	SSCE	CHPZ
	10, 11	117, 161, 151, 160, 118, 156	140, 141, 45, 78, 79, 80, 81, 82

Coastal Sector 8: **Maketu to Otamarakau**

The Maketu headland is a dominant rocky headland that has had minimal modification to its edges, apart from the upper reaches of the Maketu residential settlement. Vegetation cover is minimal with a bush clad covered escarpment extending along the eastern edge of the Little Waihi escarpment. Settlement of Little Waihi has resulted in retaining structures placed along the harbour edge to manage continue coastal erosion. Reclamation of parts of the estuary for farming have resulted in linear patterns within parts of the harbour. The Pukehina to Otamarakau dunelands are similar in many regards to the Papamoa dunelands where residential development is located on the primary and secondary dune systems. Vegetation cover is primarily coastal dune grass species with very little dominant canopy cover found along this sector. The southern feature of the Otamarakau dunelands remains largley unmodified along the coastal edge except for rear dune vegetation loss.

Below: Pukehina Beach

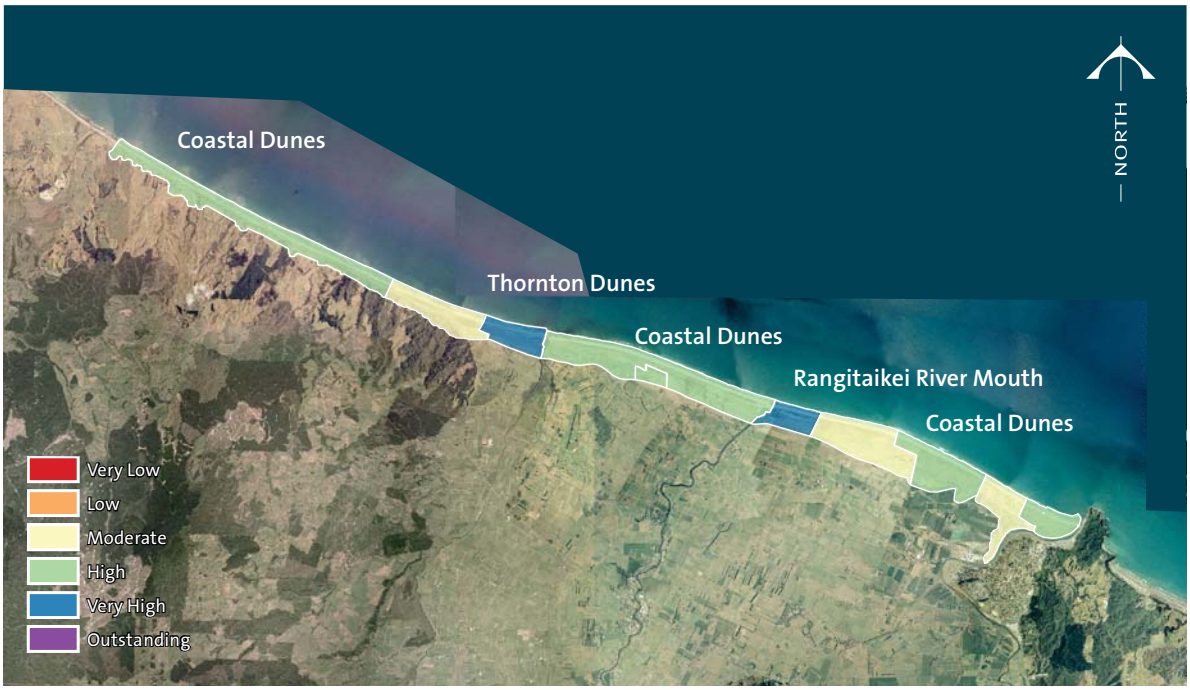
Natural Character: **Moderate**

Natural Character Feature: Waihi Estuary Margin = Moderate
Natural Character Feature: Waihi Estuary Water Body and Mouth = High
Natural Character Feature: Otamarakau Dune Lands = High

Degree of Natural Character	Evaluation	Sector Rating	Feature Rating
Water	Minimal activity occurs along the open coast with no structures, jetties or moorings. Maketu harbour and Waihi Estuary contain duck shooting hideouts, boat ramps and jetties. Both harbours have been modified through reclamation and redirection of the Kaituna River away from the estuary.	High	Waihi Est. Margin = High Waihi Est. Water Body = Very High Otamarakau = High
Land Cover and Land Use	Residential settlement on the western edge of the Maketu headland and farming land use have modified the landcover significantly. Along the eastern side a remnant pohutukawa bush clad escarpment dominates the coastal edge. Modification has occurred to the margins of the Waihi Estuary through farming practices and reclamation. The Pukehina dunes comprise a residential settlement alongside farms which extend to the top of the coastal escarpment.	Low to Moderate	Waihi Estuary Margin = Moderate Waihi Estuary Water Body and Mouth = High Otamarakau = High
Terrestrial Biotic Systems	Indigenous vegetation consists of a narrow fringe of pohutukawa forest around the coastal margins with low diversity. Most of the headland is dominated by exotic vegetation providing limited habitat and biodiversity but does provide breeding habitat for penguins. Waihi Estuary consists of freshwater wetlands (landward of the stopbanks) of moderate diversity that have been modified by drainage and exotic vegetation. The main body of the estuary, its associated saltmarshes (seaward of the stopbanks) and Pukehina Spit is more diverse and less modified by exotic vegetation or landuse. These areas provide habitat for a wide range of indigenous wading and wetland birds.	Moderate	Waihi Estuary Margin = High Waihi Estuary Water Body and Mouth = Very High Otamarakau = High
Abiotic System and Landform	Seawalls and reclamation existing within the Waihi Estuary. Dune protection measures and residential settlement managing dune erosion and accretion. Fencelines are present along the Otamarakau escarpments and coastal erosion is very active here	Moderate	Waihi Est Margin = High Waihi Est Water Body = Very High Otamarakau = High
Perceptual	Built form dominates the coastal environment at the settlements of Maketu and Pukehina. Beyond these areas the coast line has few visitors and is largely untouched.	Moderate	Waihi Est Margin = High Waihi Est Water Body = Very High Otamarakau = High

Relevant Overlays (refer appx)	ONFL	SSCE	CHPZ
	12, 13	105, 78, 159, 139, 158, 172	46

Coastal Sector 9: **Otamarakau to Piripai**



The Matata dunelands provide a striking example of the natural dune and rear dune wetland system that occurs along this sector. Modification around settlement areas and post major storm events have resulted in the loss of some natural wetlands. The location of the rail corridor and State Highway create a divide however the dune and coastal escarpment demonstrate vividly the current and historical coastal processes that occur within this landscape. The two river systems have been modified to create a new cut through the dunes, leaving the old river path behind the dunes as remnant wetlands. Residential development has occurred on the frontal dune systems and resulted in modification to the natural patterns and processes through introduced exotic planting and built form. The Piripai Spit comprises high levels of natural character however some modification to the distal end has occurred for the management of flood waters from the river.

Above: Rangitaikei River Mouth

Below: Matata Coastal Dune Lands

Natural Character: **High**

Natural Character Feature: Coastal Dunes = High
Natural Character Feature: Thornton Dunes = Very High
Natural Character Feature: Rangitakei River Mouth = Very High

Degree of Natural Character	Evaluation	Sector Rating	Feature Rating
Water	Minimal activity on the water edge and water. As an open coastal edge no physical modification to the ocean is apparent. Two river cuts are apparent, being heavily modified from their original route. The end of Piripai Spit some training walls have been placed to manage flood waters and the harbour mouth depth.	High	Coastal Dunes = High Thornton Dunes = Very High Rangitakei River Mouth = Very High
Land Cover and Land Use	A dominant coastal dune landscape, structures are apparent along the top of the coastal escarpment. The Matata and Thorton dunes remain largely unmodified except for small settlements located at Matata, Thornton and Coastlands. Dune areas with rear dune wetlands or unmodified patterns still remain.	High	Coastal Dunes = High Thornton Dunes = Very High Rangitakei River Mouth = Very High
Terrestrial Biotic Systems	The sector consists mainly of grazed pasture and dunelands with small isolated pockets of indigenous scrubland, treeland or wetlands modified by weed infestation, grazing, residential development and drainage. The Whakatane river mouth, estuary and spit has moderate diversity with regional significance and supports a range of threatened indigenous bird species. The dune systems along the length of the coast vary from relatively unmodified areas to highly modified areas, though much is considered to be of national or regional significance, with high diversity supporting threatened and uncommon indigenous plant and bird species. The river mouth and lagoon areas also support a range of indigenous fish and wetland bird species.	High	Coastal Dunes = High Thornton Dunes = Very High Rangitakei River Mouth = Very High
Abiotic System and Landform	Excellent example of natural processes with minimal modifications as a result of the State Highway extending along the Matata Straights. Farm fencing and exotic grasses are located in the rear dunes from Thornton to Piripai. Residential settlement and river modifications have resulted in modified coastal processes.	Moderate	Coastal Dunes = High Thornton Dunes = Very High Rangitakei River Mouth = Very High
Perceptual	Very low levels of activities, with few boats, very few people (pedestrian only) and small settlements at Matata, Thornton and Coastlands.	High	Coastal Dunes = High Thornton Dunes = Very High Rangitakei River Mouth = Very High

Relevant Overlays (refer appx)	ONFL	SSCE	CHPZ
	14, 15, 16, 17	81, 172, 173, 106, 79, 80, 107	86, 49, 88, 89

Coastal Sector 10: **Kohi Point to Port Ohope**

Kohi Point is a dominant landscape feature with native vegetation cover. It demonstrates high levels of natural character through the lack of modification. The Ohope dunelands are similar to all of the northern dunelands where residential development have occurred upon the frontal and secondary dune lands. The pohutukawa clad escarpment behind creates as natural backdrop and is a remnant of the unmodified environment that once occurred along this section of the coast. The Ohope spit has some modification as a result of the golf course, whilst the remainder comprises high levels of natural character.

Above: Whakatane River Mouth

Below: Ohope Beach

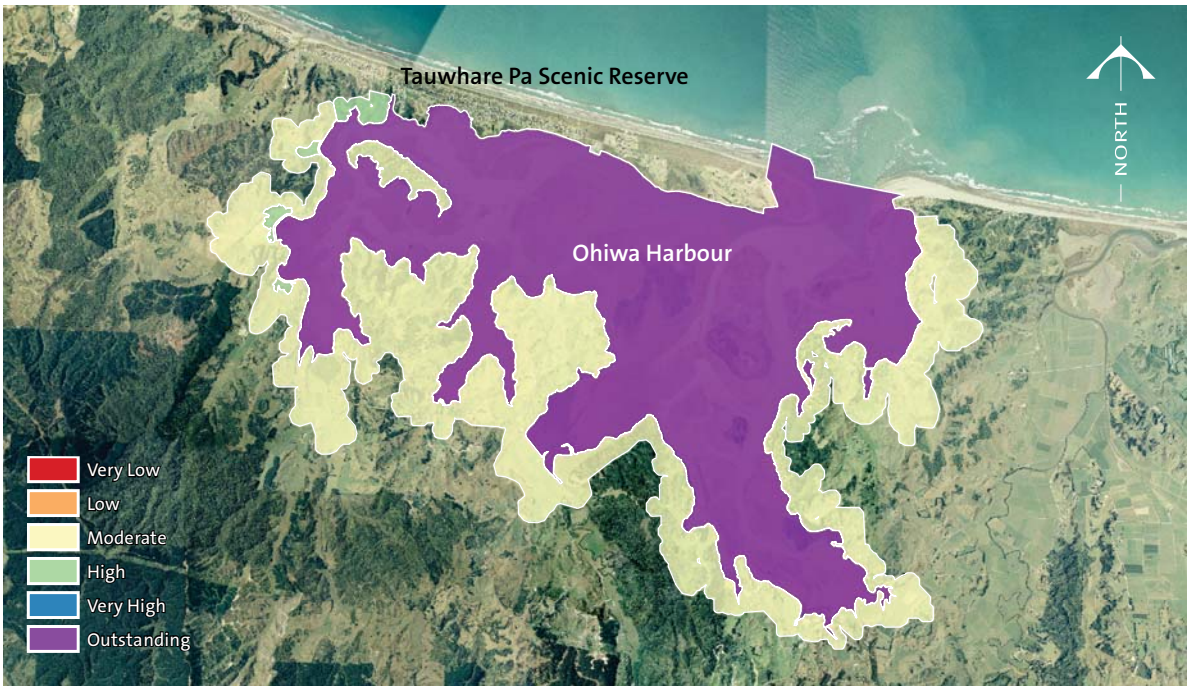
Natural Character: **Moderate**

Natural Character Feature: Ohope Spit = High
Natural Character Feature: Kohi Point = Very High
Natural Character Feature :Ohope Scenic Reserve = High

Degree of Natural Character	Evaluation	Sector Rating	Feature Rating
Water	No physical modification to the open coastal water body. The Whakatane River harbour mouth has frequent boat traffic and moorings along the harbour / river edge.	Very High	Kohi Pt = Very High Ohope Spit = High
Land Cover and Land Use	The Whakatane River margin is heavily modified with sea walls and reclamation. Kohi Point remains largely unmodified. Ohope comprises a heavily modified coastal dune land and escarpment, with some pockets of wider dune systems.	Low to Moderate	Ohope Spit = High Kohi Point = Very High Ohope Scenic Reserve = High
Terrestrial Biotic Systems	Adjacent to the urban areas, the dunes are narrow, have low to moderate diversity, are highly modified by weed infestations, and provide limited habitat for indigenous species other than common species habituated to residential environments. At the Ohope Spit, dune vegetation has higher indigenous biodiversity of regional significance and provides habitat for threatened indigenous fauna, while retaining a strong component of exotic species and modification from tracks. The mature and regenerating pohutukawa forest on the Kohi Point headlands and Ohope escarpments has regional and national significance and provides habitat for uncommon and threatened indigenous plants, but is modified by weed infestations and encroachment from residential development. .	High	Ohope Spit = High Kohi Point = Very High Ohope Scenic Reserve = High
Abiotic System and Landform	Limitations on the natural processes occuring with seawalls, dune protection measures and earthworks on the dunes. Coastal river patterns are channelled and contained. The Kohi Point headlands demonstrates the highly natural processes occuring.	Moderate	Ohope Spit = High Kohi Point = Very High Ohope Scenic Reserve = High
Perceptual	Whakatane settlement dominates the coastal edge, whilst Kohi Point remains remote piece between Whakatane and Ohope. Built form dominates Ohope beach with the beach being a popular recreational environment.	Moderate	Ohope Spit = High Kohi Point, Ohope Scenic Reserve = Very High

Relevant Overlays (refer appx)	ONFL	SSCE	CHPZ
	18, 19	82, 61, 83, 134	50, 91, 92

Coastal Sector 11: **Ohiwa Harbour**



Ohiwa Harbour is considered in two parts; The harbour and; Its margins. The harbour itself supports an important habitat for native wildlife and flora. The landform around the margins remains largely unmodified with exception of Wainui Road, the fish and chip shop, the oyster farm and Port Ohope. In the wider sense these modifications are relatively minor when the whole harbour is considered. The harbour is approximately 27km2 in area, with a width of 5.5km and length of 8km. Development of the landward extent has been largely from farming practices and associated housing. More recently rural residential subdivision has been a popular activity along the Ohiwa harbour coastline, with a small increase in the visual clutter along the landward extent. The harbour mouth is highly dynamic with the sand spit changing its form on a frequent basis. Historical residential lots for Ohiwa are now located within the harbour's water body, having been eroded.

Above: Ohiwa Harbour

Below: Ohiwa Harbour Mouth

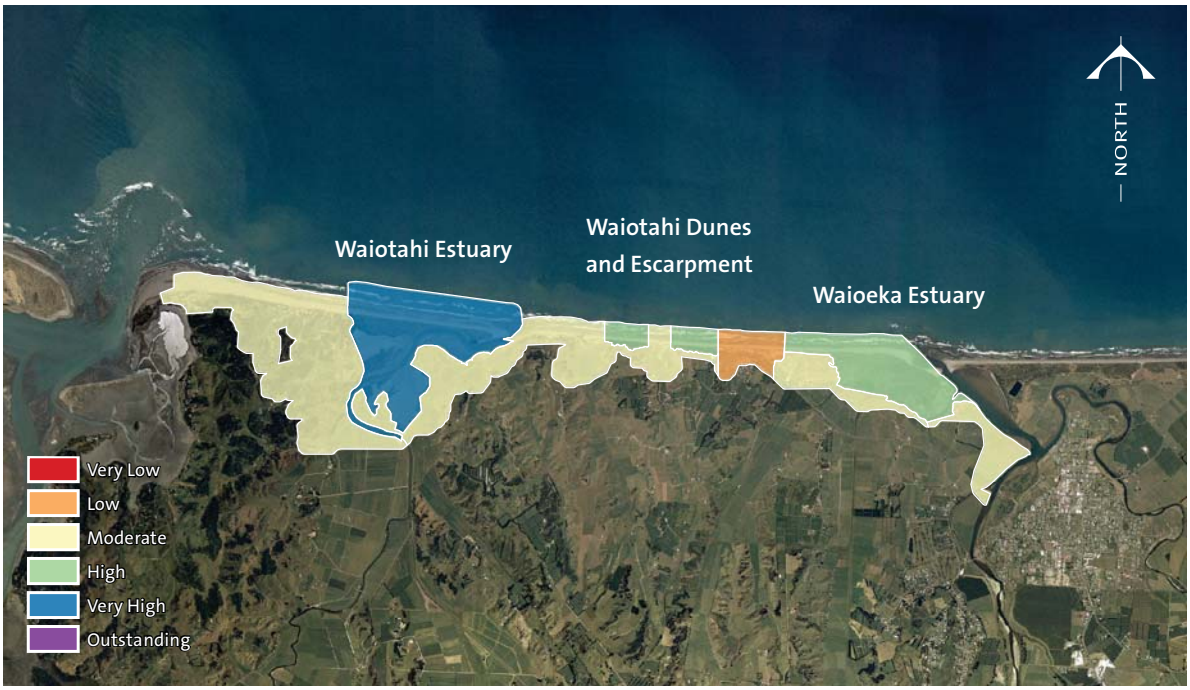
Natural Character: **High**

Natural Character Feature: Tauwhare Pa Scenic Reserve = High
Natural Character Feature: Ohiwa Harbour = Outstanding

Degree of Natural Character	Evaluation	Sector Rating	Feature Rating
Water	Minimal structures exist on the harbour, located at Ohope Wharf and the far western end jetty. The harbour is a water body that displays a diverse habitat of marine aquatic flora and fauna. A shallow harbour system the harbour displays distinctive natural patterns. A small pocket of marine farming is found at the far western end of the harbour.	Very High	Tauwhare Pa Scenic Reserve = Very High Ohiwa Harbour = Outstanding
Land Cover and Land Use	The rural landscape around the Ohiwa harbour has scatterings of dwellings consistent with a rural landscape. Much of the coastal vegetation has been lost and all that remains is set within the harbour itself, excluding Tauwhare Pa Scenic Reserve	Moderate	Tauwhare Pa Scenic Reserve = High Ohiwa Harbour = Outstanding
Terrestrial Biotic Systems	The sector consists mainly of grazed pasture and plantation forestry with small isolated pockets of indigenous scrubland or treeland modified by weed infestation and grazing. The harbour margins contain pockets of remnant coastal native bush, including Tauwhare Pa Scenic Reserve and parts of Ohakana Island. The harbour iselft is largely unmodified and displays large areas of saltmarsh and mangrove habitats. The harbour supports a diverse system of flora and fauna and is unique.	High	Tauwhare Pa Scenic Reserve = Very High Ohiwa Harbour = Outstanding
Abiotic System and Landform	Some minimal limitations on the natural processes occuring with seawalls, dune protection measures. Most coastal processes still occur with increased siltation of the harbour as a result of inland and coastal erosion processes.	High	Tauwhare Pa Scenic Reserve = Very High Ohiwa Harbour = Outstanding
Perceptual	The northern end of the harbour is busy with the Port commercial activities, residents from Ohakana Island and the users of Wainui Road. The scale of the harbour gives a sense of remoteness and the vegetation patterns and water provides a sense of wilderness.	High	Tauwhare Pa Scenic Reserve = Very High Ohiwa Harbour = Outstanding

	ONFL	SSCE	CHPZ
Relevant Overlays (refer appx)	20, 21, 22	126, 133, 45, 125, 40, 44, 55, 84, 41, 43, 162, 39, 57, 86, 36, 65, 64, 164, 62, 87, 89, 61, 163	36, 37, 38, 58, 136, 33, 54, 53, 40, 50

Coastal Sector 12: **Ohiwa to Opotiki**



Rolling foothills extend down to a steep escarpment that meets the coastal dunelands between the Ohiwa and Waiotahi settlements. Pockets of native vegetation cover are located along the roadside edge by Waiotahi settlement. The dune environment at Waiotahi has been modified as a result of residential subdivision. The Waioeka wetlands and river mouth comprise a largely unmodified coastal edge with some farming practices around the edges.

Above: Waiotahi Estuary

Below: Waiotahi Dunes and Escarpment

Natural Character: **Moderate**

Natural Character Feature: Waiotahi Dunes and Escarpment = High
Natural Character Feature: Waiotahi Estuary = Very High
Natural Character Feature: Waioeka Estuary = High

Degree of Natural Character	Evaluation	Sector Rating	Feature Rating
Water	No structures along the open coastal edge. Waiotahi Estuary contains some modification to the water body edges through reclamation. The river body alongside	High	Waiotahi Dunes and Escarpment = High Waiotahi Estuary = Very High Waioeka Est. = High
Land Cover and Land Use	Small coastal settlements of Ohiwa and Waiotahi have modified the dune environment. Large dune land and wetlands are located adajcent to the Waioeka River. Pohutukawa clad escarpment dominates small pockets of the coastal edge. The state highway extends along the coastline dividing the coastal landscape.	Moderate	Waiotahi Dunes and Escarpment = High Waiotahi Estuary = Very High Waioeka Est.= High
Terrestrial Biotic Systems	Large parts of the sector consist mainly of grazed pasture with limited diversity. The Waioweka Estuary and associated wetlands has high diversity and regional significance, and provides habitat for a range of indigneous bird and fish species. Waiotahi Beach consists of narrow dunelands with moderate diversity and regional significance that are modified by tracking, grazing and weed infestations but does support dotterel breeding sites. The Waiotahi River estuary and spit consists of a diverse range of indigenous vegetation types from forest to sandfields with high diversity and regional significance. It provides habitat for a wide range of indigenous shorebirds, wading birds and indigenous fish species.	Moderate to High	Waiotahi Dunes and Escarpment = High Waiotahi Estuary = Very High Waioeka Est.= High
Abiotic System and Landform	Limitations on the natural processes occuring with dune protection measures and earthworks on the dunes. The harbour entrances remain unmodified, however the Waiotahi Estuary has some river and edge modification.	High	Waiotahi Dunes and Escarpment = High Waiotahi Estuary = Very High Waioeka Est.= High
Perceptual	Ohiwa and Waiotahi are small settlements with the coastal environment having a sense of untouched wilderness and remoteness.	High	Waiotahi Dunes and Escarpment = High Waiotahi Estuary = Very High Waioeka Est.= High

Relevant Overlays (refer appx)	ONFL	SSCE	CHPZ
	23, 24, 25	90, 88	41, 94, 95, 93, 96, 53

Coastal Sector 13: **Opotiki to Opape**

The dune system extends along this landscape and has pockets of modification to its frontal dune system as a result of residential development and the National Cycletrail. The Waiaua River mouth remains unmodified in its natural patterns with some modification to its vegetation cover. The coastal escarpment is set further back form the coastal edge, with more undulation in the landform as a result of several spurs that extend down to meet the coast. Adjoining the coastal dunes, the land has in most areas been modificed to accomodate stock grazing and cropping paddocks. Stock intrusion into parts of the dune system has occurred, damaging native vegetation cover. Many walking tracks extend across the dunes, providing access to the beach for local residents.

Above: Tirohanga Dune Lands

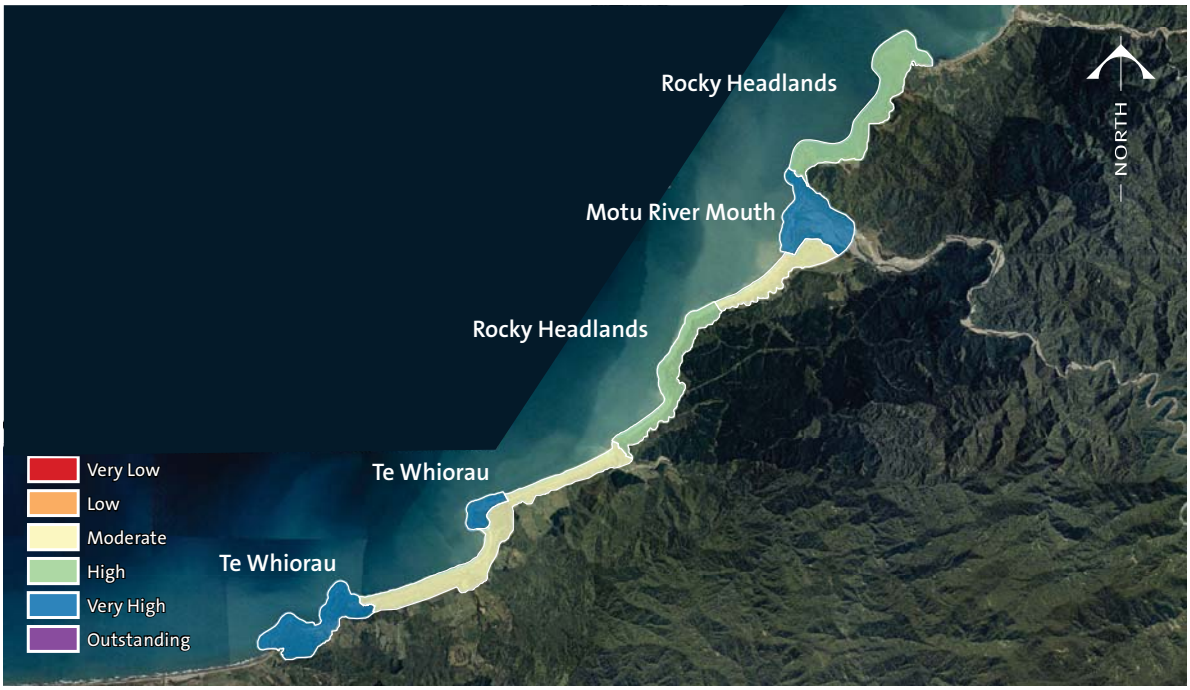
Below: Tirohanga Dune Lands

Natural Character: **High**

Natural Character Feature: Waiaua River = High			
Degree of Natural Character	**Evaluation**	**Sector Rating**	**Feature Rating**
Water	No structures are located along the open coastal edge. The Waioeka River has modification for flood management along its margins and the channel is managed. The Waiaua River mouth remains unmodified.	Very High	Waiaua River = High
Land Cover and Land Use	A coastal walkway extends along the dune system which extends along the entire sector. Small clusters of housing at Tirohanga have modified the coast line. The Waiaua River remains unmodified at its river mouth. Rear dune vegetation is minimal but frontal dune vegetation remains.	Moderate	Waiaua River = High
Terrestrial Biotic Systems	The sector consists mainly of grazed pasture with a narrow band of dune vegetation modified by weed infestation and grazing. The wider section of sand flats, saltmarsh and estuary at the Waiaua River mouth has high diversity with regional significance, and the estuary provides significant habitat for indigenous fish and bird species, but is modified by grazing.	High	Waiaua River = High
Abiotic System and Landform	Parts are highly natural with unmodified dune processes occuring. Residential areas have modified and manage dune processes. The Waiaua River mouth displays an unmodified river mouth with unique coastal processes	High	Waiaua River = High
Perceptual	The coastal environment having a sense of untouched wilderness and remoteness. There is infrequent users of the coastal environment, however more are planned for the national cycleway.	High	Waiaua River = High

Relevant Overlays (refer appx)	ONFL	SSCE	CHPZ
	none	93, 95	59, 96, 97

Coastal Sector 14: **Opape to Pokohinu Pt**



From Opape to the end of the region, the coastal environment comprises a rocky coastline with small sandy embayments sited between rocky headlands. The Tarakeha peninsula is the first of many peninsula in this area that are covered in native vegetation. Pohutukawa outcrops extend around peninsula and form a transition between the rocky coastal edge and the landward coastal environment. Torere Bay, Hawai, Whituare Bay and Maraenui comprise sandy embayments where much of the settlement is sited. Cropping and grazing paddocks abut the dune system and in some places stock grazing extends across the dunes. Much of the native coastal vegetation exists around the rocky headlands with the embayments been modified for productive landuse. The Motu River remains an unmodified feature of the coastal edge, with its vegetation cover a mixture of native and exotic species.

Above: Te Whiorau and Torere Bay

Below: Te Whiorau

Natural Character: **Very High**

Natural Character Feature: Rocky headlands = High
Natural Character Feature: Te Whiorau headland, Motu River mouth = Very High

Degree of Natural Character	Evaluation	Sector Rating	Feature Rating
Water	An unmodified coastline the water body has minimal modification to it. Small boat ramps located for settlements.	Very High	Rocky headlands = High Motu River = Very High
Land Cover and Land Use	Native vegetated clad deadlands dominate the coastline with minimal modification. The rocky coastline remains unmodified, with settlement located within the embayments. The coastal road extends entirely wtihin the coastal environment	High	Rocky headlands = High Te Whiorau headland, Motu River mouth = Very High
Terrestrial Biotic Systems	Large parts of the sector consist mainly of grazed pasture, but the headlands have vegetation consisting of indigenous scrubland and treeland including pohutukawa and taraire with regional significance, and are connected with inland indigenous vegetation features. Diversity is high because of the range of forest types and sequences which support a wide range of indigenous bird species and support a nationally critical plant species. Haparapara River is notable for outstanding wildlife value supporting threatened indigenous fish species. The associated rocky reefs and small islets are likely to have relatively unmodified intertidal and subtidal indigenous fauna and vegetation.	High	Rocky headlands = High Te Whiorau headland, Motu River mouth = Very High
Abiotic System and Landform	Parts are highly natural with an unmodified rocky coastline and coastal processes occuring. Residential areas have modified the upper terraces. The Motu River mouth displays an unmodified river mouth with unique coastal processes.	Very High	Rocky headlands = High Te Whiorau headland, Motu River mouth = Very High
Perceptual	The coastal environment having a sense of untouched wilderness and remoteness. There is infrequent use of the coastal environment, with small remote settlements accessing the water via boat ramps and small beaches.	High	Rocky headlands = High Te Whiorau headland, Motu River mouth = Very High

Relevant Overlays (refer appx)	ONFL	SSCE	CHPZ
	26, 27, 28, 29, 30, 31, 32, 33	97, 166	101, 61, 98

Coastal Sector 15: Pokohinu Point to Whanarua Bay

Omaio Bay forms a sandy beach with rolling hills dropping to meet a low duneland and the river mouth of the Haparapara River. A small concentrated residential settlement is located at Omaio Bay, with rural residential and rural farming extending down to meet the coastal edge. Much of the coastline comprises a rocky shelf that extend from the coast. Pohutukawa and native coastal bush clad peninsul, with Te Kaha Point having pockets of native vegetation cover at the edge, intermingled with grazing and cropping paddocks along the coastal edge. The coastal road extends along the coastal environment providing access to a number of small residential settlements.

Above: Te Kaha

Below: Haparapara River

Natural Character: **Moderate**

Natural Character Feature: Rocky headlands = High
Natural Character Feature: Haparapara River mouth = Very High

Degree of Natural Character	Evaluation	Sector Rating	Feature Rating
Water	An unmodified coastline the water body has minimal modification to it. Small boat ramps located for settlements and at river mouths. The Motu River displays an unmodified water body discharging into the open coast.	Very High	Rocky headlands = High Haparapara River mouth = Very High
Land Cover and Land Use	The river systems remain unmodified. Farming and settlement have resulted in the loss of vegetation cover along the entire coast. Pockets of settlement are located at Omaio, Hairiki Beach and Te Kaha.	Low to Moderate	Rocky headlands = High Haparapara River mouth = Very High
Terrestrial Biotic Systems	Large parts of the sector consist mainly of grazed pasture, but the headlands have vegetation consisting of indigenous scrubland and treeland including pohutukawa and puriri with regional and national significance, and are connected with inland indigenous vegetation features. Diversity is high because of the range of forest types and sequences which support a wide range of indigenous bird species. Motu River is notable as a breeding and roosting site for indigenous birds but is modified by weed infestations. The associated rocky reefs and small islets are likely to have relatively unmodified intertidal and subtidal indigenous fauna and vegetation.	Moderate	Rocky headlands = High Haparapara River mouth = Very High
Abiotic System and Landform	Parts are highly natural with an unmodified rocky coastline and coastal processes occuring. Residential areas have modified the upper terraces. The Haparapara River mouth displays an unmodified river mouth with unique coastal processes.	Very High	Rocky headlands = High Haparapara River mouth = Very High
Perceptual	The coastal environment having a sense of untouched wilderness and remoteness. There is infrequent use of the coastal environment, with small remote settlements accessing the water via boat ramps and small beaches. Te Kaha has built form that dominates the coast, but only affects its immediate coastal edge.	High	Rocky headlands = High Haparapara River mouth = Very High

Relevant Overlays (refer appx)	ONFL	SSCE	CHPZ
	34	none	103, 105

Coastal Sector 16: **Whanarua to Waihau Bay**

Whanarua Bay comprises residential settlement set amongst dominant native coastal busy. The rocky coastline, steep escarpment and native vegetation cover provides a visually striking coastal landscape. Modification to the landform is minimal in most parts, as the steep hills limit land use activities. Grazing of some of the hill slopes has resulted in the denuding of parts of the coastline , however the coastal edge has remained heavily vegetated. Papatea Bay has developed the lower river plains meeting the coast into grazing land, with modification ot the coastal edge. The Raukokore River mouth remains unmodifiifed and demonstrates the natural river patterns and processes of other rivers along this part of the coast. Toward Waihau Bay, the peninsula forms to a raised flat plateau and grazing and cropping paddocks dominate. Clusters of residential settlements are found along the coast, and are sparsely sited.

Above: Whanarua Bay

Below: Raukokore

Natural Character: **High**

Natural Character Feature: Rocky headlands = High
Natural Character Feature: Raukokore River = High

Degree of Natural Character	Evaluation	Sector Rating	Feature Rating
Water	An unmodified coastline, in part, the water body has minimal modification to it. Small boat ramps located for settlements and at river mouths. The Haparapara River displays an unmodified water body discharging into the open coast.	Very High	Rocky headlands = High Raukokore River = High
Land Cover and Land Use	Pockets of native vegetation cover extend along the rocky foreshore. Farming has resulted in removal of much of the vegetation cover. Filling of the rear dunes occurs from major road works has occurred.	Moderate	Rocky headlands = High Raukokore River = High
Terrestrial Biotic Systems	The eastern half of the sector consists mainly of grazed pasture, but the headlands west of the Raukokore River mouth and beach have vegetation consisting of indigenous scrubland and treeland including pohutukawa and puriri with national and regional significance. Raukokore Beach and river mouth has high habitat diversity ranging from dunes to wetlands, supporting a diverse indigenous bird and fish fauna. It has national significance but is modified by grazing and weed infestations. The associated rocky reefs and small islets are likely to have relatively unmodified intertidal and subtidal indigenous fauna and vegetation.	High	Rocky headlands = High Raukokore River = High
Abiotic System and Landform	Parts are highly natural with an unmodified rocky coastline and coastal processes occuring. Residential areas have modified the upper terraces. The Raukokore River mouth displays an unmodified river mouth with unique coastal processes.	Very High	Rocky headlands = High Raukokore River = High
Perceptual	The coastal environment having a sense of untouched wilderness and remoteness. There is infrequent use of the coastal environment, with small remote settlements accessing the water via boat ramps and small beaches.	Very High	Rocky headlands = High Raukokore River = High

	ONFL	SSCE	CHPZ
Relevant Overlays (refer appx)	35, 36, 37	100, 168, 99, 167, 98	105, 107, 109

Coastal Sect. 17: Waihau Bay to Cape Runaway

Waihau Bay comprises a dense settlement of residential and small scale commercial buildings. Settlement is clustered in this part of the coast to Waihau Bay and Whangaparaoa. The vertical clifss of Te Ahikehe Point demonstrate the dynamic coastal processes occuring in the bay. Whangaparaoa Bay comprises signficiant dune and rear dune wetlands that dominate the coast, with settlement located behind these features. Cape Runaway forms a dominant headland and is covered in regenerating bush.

Above: Cape Runaway

Below: Te Ahikehe Point

Natural Character: **High**

Degree of Natural Character	Evaluation	Sector Rating	Feature Rating
Water	Modification to the coastal edge at Waihau Bay for the boat ramp and moored vessels. Infrequent use of the coastal waters, mainly recreational, some small scale commercial.	High	n/a
Land Cover and Land Use	Settlement and farming practices around Waihau bay have removed any remnant vegetation cover. Infrastructure and settlement extends along the coast at Waihau Bay. The immediate coastal edge remains largely unmodified from Te Ahikehe Point to Cape Runaway.	Moderate	n/a
Terrestrial Biotic Systems	The sector consists mainly of grazed pasture, but the headland of Cape Runaway is reverting to indigenous scrub and pohutukawa forest with high habitat diversity and has regional significance. Otarawhata Island is a known breeding site of white-fronted terns and has regional significance. Whangaparaoa Beach and river mouth has high habitat diversity ranging from dunes to wetlands, supporting a diverse indigenous bird and fish fauna. It has national significance but is modified by grazing and weed infestations. The Oruaiti Beach dunes and rocky headlands are part of a larger feature that has vegetation sequences from the coast to the ridgeline, and has high habitat diversity and regional/ national significance but is modified by recreational uses and weed infestations. The associated rocky reefs and small islets are likely to have relatively unmodified intertidal and subtidal indigenous fauna and vegetation.	High	n/a
Abiotic System and Landform	Waihau Bay settlement has resulted in some coastal edge protection. The natural dune processes still occur, modified through land use practices. Coastal erosion dominates Te Ahikehe Point.	High	n/a
Perceptual	Waihau Bay has built form which is evident along the coast. Natural coastal sounds dominate but some settlement and associated acitivites reduces the sense of remoteness. Cape Runaway has minimal use and is very remote with a strong sense of wilderness.	High	n/a

Relevant Overlays (refer appx)	ONFL	SSCE	CHPZ
	37, 38, 39, 40	120	109, 113, 115, 62

Coastal Sect. 18: Cape Runaway to Potikirua Pt

A steep rocky coastline extends along this entire sector. Road access is sited behind the dominant ridge and outside the coastal environment. Settlement is sparse in this area with some rural housing and a single hotel located along the mid slopes of the coastal edge. Vegetation cover has been modified to accomodate grazing of stock, however dominant pockets are located along the edge and up into valleys that meet the coastal edge. The rocky shoreline provides a wild and scenic coastline and that has a sense of remoteness.

Above: Cape Runaway

Below: Tahurua Point

Natural Character: **High**

Degree of Natural Character	Evaluation	Sector Rating	Feature Rating
Water	Unmodified steep rocky coastline with infrequent use of the coastal waters.	Very High	n/a
Land Cover and Land Use	Modification to the landcover has occurred through land use practices of farming. Largely unmodified except for a single remote hotel located along the coast.	Low to Moderate	n/a
Terrestrial Biotic Systems	The sector consists mainly of grazed pasture with isolated pohutukawa forest remnants (grazed) and small areas of scrubland that will provide limited habitat for common indigenous fauna species. The associated rocky reefs and small islets are likely to have relatively unmodified intertidal and subtidal indigenous fauna and vegetation.	Low to Moderate	n/a
Abiotic System and Landform	Excellent example of natural processes with no modifications to the coastal processes.	Very High	n/a
Perceptual	The coastal environment having a sense of untouched wilderness and remoteness. Access to the water is limited and a scattering of dwellings do not dominate the coastal environment.	High	n/a

Relevant Overlays (refer appx)	ONFL	SSCE	CHPZ
	41	102	none

Coastal Sect. 19: Whakaari and Te Paepae o Aotea

Whakaari (White Island) is the crater of an active volano located 44km off the Bay of Plenty coastline. The island is 19.8km2 in area and is boarded by cliffs formed by ocean wave erosion. Vegetation cover on the island is limited to 14 species including pohutukawa.

Above: Sulphur deposits. Below: White Island

Source: Tourism Bay of Plenty

Natural Character: **Outstanding**

Degree of Natural Character	Evaluation	Sector Rating	Feature Rating
Water	Some minimal modification to the island for access for tourism and monitoring.	Very High	n/a
Land Cover and Land Use	Historical mining occurred however remain as remnants only. Structures exist to provide tourist access and remain minor.	Very High	n/a
Terrestrial Biotic Systems	Both features include the main islands and a number of associated islets and rocky reefs with indigenous vegetation that are naturally of low diversity, and are nationally significant. The islands provide habitat for a range of seabirds. The associated marine reserve recognises the unique marine biodiversity associated with the subsurface geothermal features.	Outstanding	n/a
Abiotic System and Landform	Excellent example of natural processes with no modifications to the coastal processes.	Very High	n/a
Perceptual	Very low level of activity with a high sense of remoteness and wilderness. The volcanic island's active status demonstrates the wilderness and its distance from shore contributes to its remoteness.	Very High	n/a

Relevant Overlays (refer appx)	ONFL	SSCE	CHPZ
	46	none	126, 125

Coastal Sect. 20: **Moutohora Is. and Rurima Is.**

Moutohora Island (Whale Island) and Rurima Island are located on the Pacific Ring of Fire. Whale Island displays a range of natural features and processes occuring on the island, including a volcanic field running through the centre of the island. Rurima Island is located XX north of Whale Island and contains similar vegetation cover and rock formations.

Above: Moutohora Island

Below: Rurima Island

Natural Character: **Outstanding**

Degree of Natural Character	Evaluation	Sector Rating	Feature Rating
Water	Some minimal modification to Moutohora Island for access for recreation and monitoring.	Outstanding	n/a
Land Cover and Land Use	Structures exist to provide tourist access and remain minor. A DOC hut is located on Moutohora Island for accomodation.	Very High	n/a
Terrestrial Biotic Systems	Rurima Islands Wildlife Refuge includes several islands with complete cover of a diverse range of vegetation types and are nationally significant. They have no mammalian pests, high biodiversity and provides habitat for a wide range of endemic, threatened and rare flora and fauna species, notably tuatara. Moutohora Island Wildlife Management Reserve has complete cover of a diverse range of vegetation types including a unique sequence of geothermal vegetation occurs from the high tide mark up to forest and is nationally significant. It has no mammalian pests, has very high biodiversity and provides habitat for a wide range of endemic, threatened and rare flora and fauna species. Some exotic weed species are present.	Outstanding	n/a
Abiotic System and Landform	Excellent example of natural processes with no modifications to the coastal processes.	Very High	n/a
Perceptual	Very low level of activity with a high sense of remoteness and wilderness. Motuhora island's active volcanic crevass demonstrates the wilderness and its distance from shore contributes to its remoteness.	Very High	n/a

Relevant Overlays (refer appx)	ONFL	SSCE	CHPZ
	45		123, 124

Coastal Sector 21: **Tuhua**

Tuhua is a 15km wide shield volcano dominated by a 3km caldera crater. The volcano has the most diverse history of volcanic eruption types and is reknown for its unique obsidian glass found on the island. As a DOC and Marine Reserve the island's remoteness is apparent. Vegetation cover is indigenous and remains untouched. Occupation of the island was historically Maori with an existing DOC hut located on the island. Access to the island is gained from South East Bay by boat. Several lakes exist on the island and are geothermally heated. As the largest off shore island, it displays high values in natural character and is also an Outstanding Natural Landscape.

Above: Tuhua (Mayor Island)

Below: Tuhua (Mayor Island) viewed from the mainland

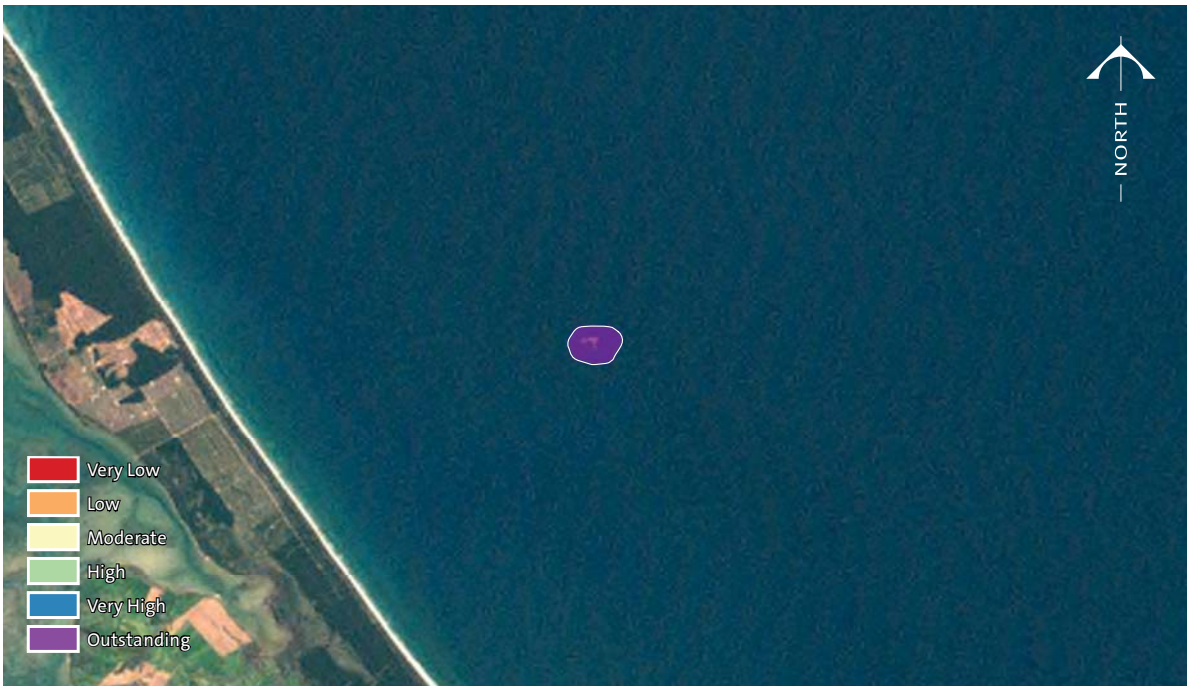
Source: Wikipedia-Schwede66

Natural Character: **Outstanding**

Degree of Natural Character	Evaluation	Sector Rating	Feature Rating
Water	No modification to coastal edge for access and use. Marine Reserve extends around the island.	Outstanding	n/a
Land Cover and Land Use	Structures exist to provide tourist access and remain minor. A DOC hut is located on the island for accomodation.	Very High	n/a
Terrestrial Biotic Systems	The indigenous pohutukawa forest of Mayor Island Wildlife Sanctuary provides almost complete cover on the island and is nationally significant. It is unmodified by possums, has no mammalian pests, has very high biodiversity and provides habitat for a wide range of endemic, threatened and rare flora and fauna species. Some exotic weed species are present. The surrounding rocky reefs are known to support moderate to high marine biodiversity.	Outstanding	n/a
Abiotic System and Landform	Excellent example of natural processes with no modifications to the coastal processes.	Very High	n/a
Perceptual	Very low level of activity and visible built form. A high sense of remoteness and wilderness are gained from its distance from shore and unmodified state.	Very High	n/a

Relevant Overlays (refer appx)	ONFL	SSCE	CHPZ
	43	none	117

Coastal Sector 22: **Karewa Island**



Karewa Island forms a steep rocky island, which provides a DOC santuary for tuatara. Vegetation cover comprises native coastal bush and canopy cover. The island is largely inaccessible due to its rocky shoreline.

Above and Below: Karewa Island

Natural Character: **Outstanding**

Degree of Natural Character	Evaluation	Sector Rating	Feature Rating
Water	No modification to coastal edge for access and use. Marine Reserve extends around the island.	Very High	n/a
Land Cover and Land Use	No structures or man made landuse practices occur on the island.	Very High	n/a
Terrestrial Biotic Systems	The indigenous vegetation of Karewa Island Wildlife Sanctuary provides almost complete cover on the island and is nationally significant. It provides habitat for a range of flora and fauna species, notably tuatara and nesting for flesh-footed shearwater. Some exotic weed species are present in low numbers and there are no mammalian pests present. The feature includes a number of outlying rocky islets and reefs.	Outstanding	n/a
Abiotic System and Landform	Excellent example of natural processes with no modifications to the coastal processes.	Very High	n/a
Perceptual	Very low level of activity and visible built form. A high sense of remoteness and wilderness are gained from its distance from shore and unmodified state.	Very High	n/a

Relevant Overlays (refer appx)	ONFL	SSCE	CHPZ
	42	none	116

Motiti Is, Motuhaku Is, Coastal Sector 23: Motunau Is and Astrolabe Reef

Motiti Island is the only inhabitated offshore island along the Bay of Plenty Coastline. As a flat plateau the island has been developed into cropping and grazing blocks. Much of the coastal vegetation has been cleared with pockets of Pohutukawa extending along the rocky shoreline. The offshore islands of Motuhaku and Motunau are relatively small rocky islands with some coastal vegetation located upon the upper plateau of the islands. / Astrolabe Reef comprises a small rocky reef extending off Motiti Island. In 2011 the Cargo Vessel Rena ran aground on the reef and remains in two parts on the reef, submerged. Considerable damage to the reef and surrounding shorelines has occurred.

Above: Motunau (Plate) Island

Below: Motiti Island

Natural Character: **Outstanding**

Natural Character Feature: Motiti Island = Moderate

Natural Character Feature: Astrolabe Reef = Assessment Deferred. *It is considered likely that the natural character of Astrolabe Reef would have been considered Outstanding prior to the grounding of the Cargo Vessel Rena. The current status of the reef will remain unknown until the wreck is removed, clean up work is completed, and an assessment can be carried out.*

Degree of Natural Character	Evaluation	Sector Rating	Feature Rating
Water	Modification for ferry access and recreational boat access. Modifcation to the coastal edge and waters has been temporarily affected by the grounding of the Cargo Vessel Rena.	High	Motiti Island = Moderate Astrolabe Reef = Assessment Deferred.
Land Cover and Land Use	Motiti Island is heavily modified for agricultural, horticultural and residential activities. Structures exist for tranport and ferry landing. The landcover has been heavily modified. The remaining islands have not been modified. It is noted that the Astrolabe Reef has been modified as a result of the recent grounding of the Cargo Vessel Rena. This is considered temporary and will require reevaluation post clean up works are completed.	Moderate	Motiti Island = Moderate
Terrestrial Biotic Systems	Indigenous vegetation consists of a narrow fringe of good quality pohutukawa forest around the coastal margin of the island with moderate diversity, and areas of wetlands with low diversity within the island. Most of the island is dominated by exotic vegetation, primarily orchards and pasture, providing limited habitat and biodiversity. The island coastal margins support a range of seabirds, shorebirds and other native bird species. The offshore islands and islets vary in the degree of modification of vegetation and generally have regional significance while Plate (Motunau) Island is unmodified and has national significance.	Outstanding	Motiti Island = Moderate
Abiotic System and Landform	Excellent example of natural processes with no modifications to the coastal processes.	High	Motiti Island = Moderate
Perceptual	For Motuhaku and Motunau the very low level of activity and visible built form. A high sense of remoteness and wilderness are gained from its distance from shore and unmodified state. Motiti Island has a parts of its coastline which are inaccessible however the modification contribute to some remoteness.	Moderate	Motiti Island = Moderate Motuhaku and Motunau Islands = Outstanding

Relevant Overlays (refer appx)	ONFL	SSCE	CHPZ
	44	143, 141, 140, 142	122

Coastal Sector 24: **Motutau Island**

Motutau Island, also known locally as Rabbit Island, forms a steep rocky island surrounded . Vegetation cover comprises native coastal bush and canopy cover. The island is largely inaccessible due to its rocky shoreline.

Above and Below: Motutau Island

Natural Character: **Outstanding**

Degree of Natural Character	Evaluation	Sector Rating	Feature Rating
Water	No modification to coastal edge for access and use.	Very High	n/a
Land Cover and Land Use	No structures or man made landuse practices occur on the island.	High	n/a
Terrestrial Biotic Systems	The indigenous pohutukawa forest of Motuatau Island Scenic Reserve provides almost complete cover on the island and is nationally significant. It provides habitat for a wide range of endemic, threatened and rare flora and fauna species. Some exotic weed species are present but are controlled. The feature includes a number of outlying rocky islets and reefs including that to the north of the nearby Motuariki Island.	High	n/a
Abiotic System and Landform	Excellent example of natural processes with no modifications to the coastal processes.	Very High	n/a
Perceptual	Very low level of activity and visible built form. A high sense of remoteness and wilderness are gained from its unmodified state. The distance from shore contributes to its reduced perception of remoteness.	High	n/a

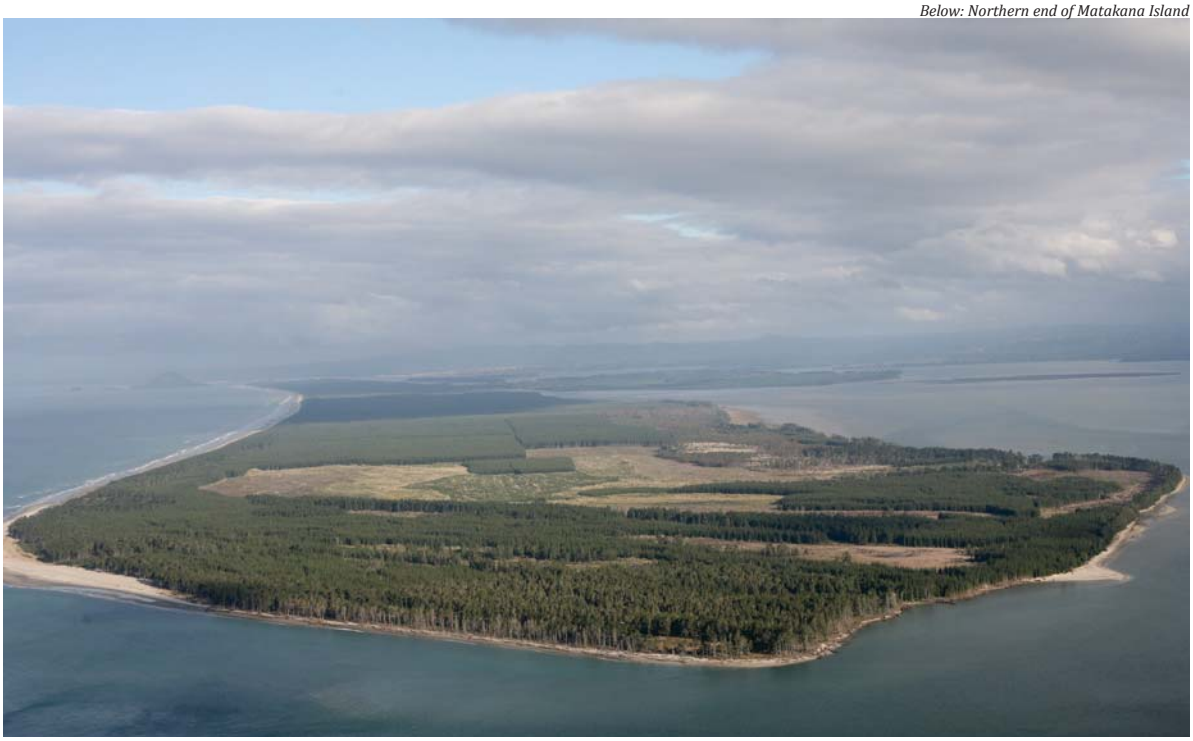
Relevant Overlays (refer appx)	ONFL	SSCE	CHPZ
	10	none	130

Coastal Sector 25: **Matakana Island**

Matakana Island is the largest barrier island in New Zealand. The coastal extent of the island forms a large sand dune system that extends some XXkm between the northern and southern harbour entrances. The harbour extent of the island comprises a raised landmass that supports a residential settlement and rural cropping and farming.

Above: Saltmarsh on Matakana Island

Below: Northern end of Matakana Island



Natural Character: **Very High**

Natural Character Feature: Northern End = Very High
Natural Character Feature: Open Coast = Very High

Degree of Natural Character	Evaluation	Sector Rating	Feature Rating
Water	The open coast is unmodified with the harbour edge modified at the settlement areas and mill site. Localised boat ramps and two ferry boat ramps extend into the harbour edge	Very High	Northern End = Very High Open Coast = Very High
Land Cover and Land Use	Much of the island has been modified through forestry, horticultural and agricultural land use practices. Settlement remains on the inner harbour side. Buildings are not visually significant. Jetties and boat ramps are found at key access points.	Moderate	Northern End = Very High Open Coast = Very High
Terrestrial Biotic Systems	The seaward coastal margin of the island includes dunes and wetlands with high quality and diverse indigenous vegetation beneath the pine canopy that has national significance and includes threatened plant species. It provides a relatively undisturbed habitat for a wide range of threatened and uncommon wetland and shore birds, notably nesting areas for NZ dotterel. On the harbour-side coastal margins, Indigenous vegetation consists of mainly of the estuarine saltmarsh and intertidal habitats. These coastal margin features are included in the Tauranga Harbour feature. Most of the island is dominated by exotic vegetation, primarily orchards, pasture and plantation forestry, providing limited habitat and diversity. Freshwater wetlands on the island vary in quality and diversity and are generally modified by invasive weed species. The wetlands provide relatively undisturbed habitat for indigenous wetland fauna and range in significance from local to national.	Moderate	Northern End = Very High Open Coast = Very High
Abiotic System and Landform	A good example of natural processes with no modifications to the coastal processes to the majority of the island. However the dominant pine plantation limits the dune coastal processes and encourages accretion of the dune system. The inner habrour edge has undergone some modification at settlement areas to manage coastal erosion and access.	High	Northern End = Very High Open Coast = Very High
Perceptual	The open coast beach has signficant remoteness and is wild. Human activity is minimal. The harbour extent and landward extent, excluding the settlement areas are remote and wild.	Moderate	Northern End = Very High Open Coast = Very High

Relevant Overlays (refer appx)	ONFL	SSCE	CHPZ
	4, 5	114, 129, 128, 123, 71, 70, 77, 115, 135	129, 142, 145, 52, 68

Coastal Sector 26: **Rangiwaea Island**

Rangiwaea Island comprises a flat raised plateau with a mixture of grazing and horticultural cropping. A small settlement and marae are located on the eastern end of the island. Access is gained by boat only with a small jetty and pontoon servicing the access.

Above and Below: Rangiwaea Island

Natural Character: **Moderate**

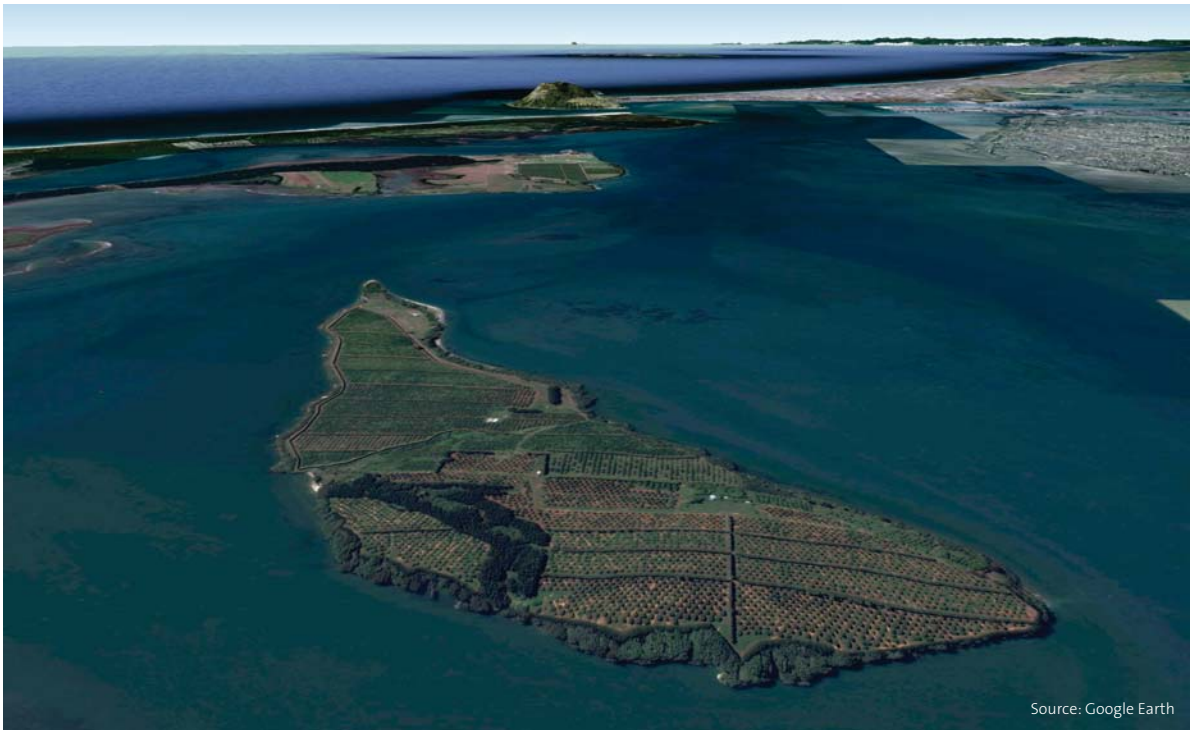
Degree of Natural Character	Evaluation	Sector Rating	Feature Rating
Water	Some modification to the immediate water edge with coastal structures, including a jetty / pontoon.	Very High	n/a
Land Cover and Land Use	Much of the island has been modified through horticultural and agricultural land use practices. A small settlement is located on the island and the buildings are not visually significant. Jetties and boat ramps are found at the southwestern end of the island.	Moderate	n/a
Terrestrial Biotic Systems	Indigenous vegetation consists of a narrow fringe around the coastal margin of the island with low to moderate diversity, wider areas of estuarine wetlands and saltmarsh with moderate diversity, and an estuary extending into the centre of the island with high diversity. The estuarine wetlands and estuary are included in the Tauranga Harbour feature. Most of the island is dominated by exotic vegetation, primarily orchards, pasture and plantation forestry, providing limited habitat and biodiversity.	Low to Moderate	n/a
Abiotic System and Landform	Modification to some of the island edges to manage erosion has occurred. Structures are present to provide island access.	High	n/a
Perceptual	Rangiwaea Island has parts of its coastline that are inaccessible. Use is limited due to access being by boat only and a limited population. The area is popular for water skiing and kayaking.	Moderate	n/a

Relevant Overlays (refer appx)	ONFL	SSCE	CHPZ
	3	150, 149, 148, 147, 171	

Coastal Sector 27: **Motuhoa Island**

Motuhoa Island comprises a flat raised plateau with a mixture of grazing and horticultural cropping. The northern side of the island has a steep escarpment and cliff's that are constantly subject to coastal erosion. Located within the southern half of the Tauranga Harbour, the island forms a

Above and Below: Motuhoa Island

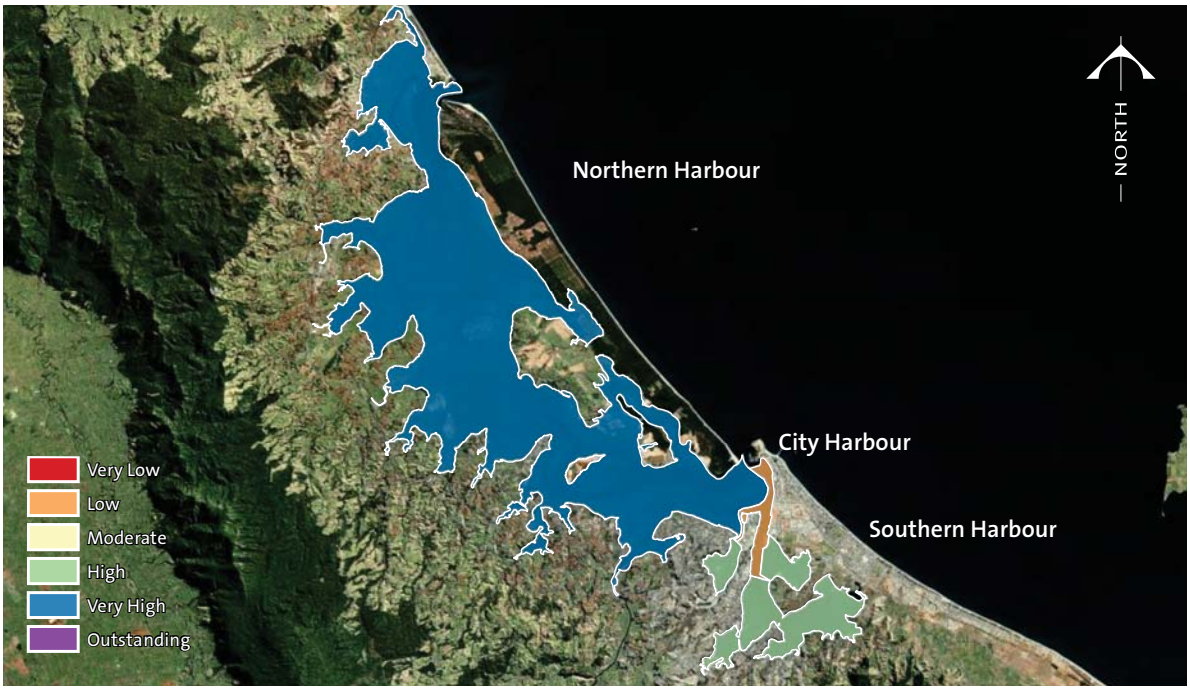


Natural Character: **Moderate**

Degree of Natural Character	Evaluation	Sector Rating	Feature Rating
Water	No modification to coastal edge for access and use.	High	n/a
Land Cover and Land Use	Much of the island has been modified through horticultural and agricultural land use practices.	Low	n/a
Terrestrial Biotic Systems	Indigenous vegetation consists of a narrow fringe of pohutukawa forest around the margin of the island with low diversity. Most of the island is dominated by exotic vegetation, primarily orchards, providing limited habitat and biodiversity.	Low	n/a
Abiotic System and Landform	Excellent example of natural processes with no modifications to the coastal processes. Coastal erosion of the island is an ongoing process and concern for residents.	Moderate	n/a
Perceptual	Motuhora Island has parts of its coastline that are inaccessible. Use is limited due to access being by boat only and a limited population. The area is popular for water skiing and kayaking.	Moderate	n/a

Relevant Overlays (refer appx)	ONFL	SSCE	CHPZ
	9	121	

Coastal Sector 28: **Tauranga Harbour**



Tauranga Harbour is a shallow tidal estuary of 224km2 of which 93% is exposed at low tide. Mangroves are present along the coastaline along with saltmarsh. More recently in settled areas the mangroves have been removed and unnatural lines formed within the vegetation patterns. Similarly there has been damage to the subtidal sea floor from the removal operations. Much of the harbour margins remain unchanged except for Tauranga City where industrial and commercial structures dominate the harbour margin. Dredging of the sea floor occurs for the Port of Tauranga shipping activities and sedimentation is apparent in the southern harbour estuarys where reclamation has contributed to the retention of sediment.

Above and Below: Tauranga Harbour

Natural Character: **Very High**

Natural Character Feature: Northern Harbour = High
Natural Character Feature: City Harbour = Very Low
Natural Character Feature: Southern Harbour = High

Degree of Natural Character	Evaluation	Sector Rating	Feature Rating
Water	Inlets and water ingress to the harbour have been modified to concentrate flows of water around built up areas. There has been significant modification to the City Harbour to accomodate commercial and recreational harbour use. Other parts of the northern and southern harbour estuaries remain largely unmodified and in a natural state.	Very High	Northern Harbour - Very High City Harbour - Low Southern Harbour - High
Land Cover and Land Use	Part of the harbour have been heavily modified to accomodate commerical port activities, boat ramps and deep water access to boat ramps. Channel markers are scattered throughout the harbour and are visible during the night time.	High	Northern Harbour = High City Harbour = Very Low Southern Harbour = High
Terrestrial Biotic Systems	Tauranga Harbour below MHWS has low modification and includes the extensive areas of seagrass, saltmarsh around the margins of the mainland and islands, mangrove shrublands, transitions to freshwater wetlands at river mouths, shell and sand banks used by indigenous birds. It has high diversity of habitats and vegetation types, areas with regional and national significance, and supports a wide range of indigenous bird and fish species including uncommon and threatened species. It is noted within the southern harbour and city harbour	Moderate	Northern Harbour - Very High City Harbour - Low Southern Harbour - Moderate
Abiotic System and Landform	A mixture of excellent examples of coastal processes along with signifcant changes to the coastal processes. The northern end of the harbour remains largely unmodified except for the settlement areas. The southern end of the harbour is largely modified with reclamation for the port, roads and bridges and retaining for residential settlement to prevent erosion.	Moderate to High	Northern Harbour - Very High City Harbour - Low Southern Harbour - High
Perceptual	Parts of the harbour are inaccessible by boat and foot. Large parts of the northern harbour have a strong sense of remoteness particularly alongside Matakana Island. Adjacent to the mainland the harbour is more accessible and numerous activities occur along the harbour margins. Beaches are popular recreation spots and residential settlements clutter the coastline.	Moderate	Northern Harbour - Very High City Harbour - Low Southern Harbour - High

	ONFL	SSCE	CHPZ
Relevant Overlays (refer appx)	3	74, 130, 101, 145, 137, 13, 72, 127, 112, 1, 131, 154, 14, 144, 28, 10, 6, 12, 124, 11, 25, 15, 24, 22, 138, 171, 174, 135, 30, 115, 17, 77, 27	12, 138, 14, 19, 42, 6, 11, 48, 7, 64, 13, 4, 5, 8, 1, 18, 157, 134, 17, 3, 69, 27, 144, 25, 26, 28, 131, 27, 29, 68, 70, 76, 147, 71, 148, 149

Appendices

GIS Data Inventory

Bay of Plenty Regional Council

Short name	Description	Date / version	Projection	Accuracy	Supply date
Aerials: Opotiki	Aerial photographs for Opotiki area.	2003	NZMG	1:5,000	16/08/2010
Aerials: Rotorua	Aerial photographs for Rotorua area.	2006	NZMG	1:5,000	17/07/2009
Aerials: Western Bay of Plenty	Aerial photographs for Western Bay of Plenty area.	2007	NZMG	1:5,000	Unknown
Aerials:Whakatane	Aerial photographs for Whakatane area	2007	NZMG	1:5,000	16/06/2010
AreaSigConCulVal	Area of Significant Conservation or Cultural Value in the Coastal Marine Area	Current RPS	NZMG	1:25,000	06/07/2010
ASCH99	Area sensitive to Coastal Hazards	Current RPS	NZMG	1:25,000	26/07/2010
CoastlineBOPRegion	Bay of Plenty Coast line	Current RPS	NZMG	1:25,000	Batch 2
CHPZ_2010	Coastal habitat Preservation Zone	Current RPS	NZMG	Unknown	Unknown
Coastal Marine Areas and River Mouths	Coastal marine area boundary at the river mouth	Current RPS	NZMG	Unknown	06/07/2010
Coastal ONFL Revision A	Coastal outstanding features and landscapes	Current RPS	NZMG	1:25,000	Unknown
DEM: WDC_2m_DEM	2m digital elevation model for selected areas of the Whakatane District	Unknown	NZTM	1:5,000	Unknown

Short name	Description	Date / version	Projection	Accuracy	Supply date
DEM: WBOPDC_TCC_DEM_2m	2m digital elevation model for selected areas of the Western Bay of Plenty District and Tauranga City Councils.	Unknown	NZTM	1:5,000	Unknown
DEM: Opotiki_DEM_2m	2m digital elevation model for selected areas of the Opotiki District	Unknown	NZTM	1:5,000	Unknown
Dunelands	Defining the extent of the Dunelands	Unknown	NZTM	1:25,000	Unknown
HistoricHeritageInventory		Unknown	NZMG	Unknown	06/07/2010
InundationLevelsRangitaikiPlains	Coastal inundation extent on the Rangitaiki plains as shown in the operative Regional policy Statement	Current RPS	NZMG	1:25,000	20/07/2010
InundationLevelsTGAHarbour	Coastal inundation line in the Tauranga Harbour as shown in the operative Regional policy Statement	Current RPS	NZMG	1:25,000	20/07/2010
InundationRisk_WDC2007	Coastal inundation risk in the Whakatane area as shown in the operative Regional policy Statement	Current RPS	NZMG	1:25,000	20/07/2010
OpotikiCoastalInundationZones	Coastal inundation risk in the Opotiki area as shown in the operative Regional policy Statement	Current RPS	NZMG	1:25,000	20/07/2010
Outstanding Coastal Landscapes	Outstanding coastal landscapes	2006	NZMG	1:50,000	Unknown
Outstanding Inland Landscapes	Outstanding inland landscapes	2007	NZMG	1:50,000	Unknown
PapamoaBellRd FloodableArea	Floodable areas in Bell Road area Papamoa	Current RPS	NZMG	Unknown	20/07/2010
SH_Bridges	Bridges on State highways	Unknown	NZMG	Unknown	06/07/2010
SoilsBOPRegion	Soils of the BOP region	Unknown	NZMG	Unknown	06/07/2010
SSCE_2010		Unknown	NZMG	Unknown	06/07/2010
Tauranga_Bridges	Tauranga City Councils bridges	Unknown	NZMG	Unknown	06/07/2010

Short name	Description	Date / version	Projection	Accuracy	Supply date
Wbopdc_bridges	Western Bay of Plenty District Council Bridges	Unknown	NZMG	Unknown	06/07/2010
Whakatane_bridges	Whakatane District bridges	Unknown	NZMG	Unknown	06/07/2010

Other data sources

Short name	Description	Date / version	Projection	Source	Accuracy	Supply date
Addresses	New Zealand coverage of street addresses.	Feb 2010	NZTM	BML	1:5,000	Feb 2010
Archaeological	New Zealand index of Archaeological sites	2008	NZTM	NZAA	1:50,000	2008
Climate datasets	New Zealand coverage of frost, rain and solar predictions for each month	Unknown	NZTM	NIWA	1:50,000	2009
Council boundaries	Territorial and Regional Council Boundaries	2006	NZTM	BML	1:50,000	Unknown
Geopreservation_sites_NZ	New Zealand coverage of the Geopreservation sites.	Unknown	NZMG	BML	1:50,000	Unknown

Short name	Description	Date / version	Projection	Source	Accuracy	Supply date
LCDB2	Landcover Database 2 (LCDB2) dataset polygon shapefiles. This database (LCDB2) is a thematic classification of 42 land cover and land use classes. The polygon features contain a code and boundary representing the land cover type for the period Summer 1997 / 97 and Summer 2001 / 02. The data set was designed to be compatible in scale and accuracy with Land Information New Zealand's 1:50,000 topographic database.	Summer 1997/98 and Summer 2001/02	NZTM	MFE	1:50,000	2004
LENZ	Land Environments of New Zealand (LENZ) environmental classification shapefiles & grids; intended to underpin a range of conservation and resource management issues. Landscape classification that groups together sites that have similar environmental conditions. Climate, soils and landform information included. Grid data at 25 & 100 metres & polygons. Levels 1 to 4 classifications & Threatened Environments.	Unknown	NZMG	MFE	1:50,000	Unknown

Short name	Description	Date / version	Projection	Source	Accuracy	Supply date
NZLRI	Land Resource Inventory (LRI) polygon database with landcover information including rock, soil, slope, erosion, and vegetation. The data were collected between 1973 and 1979 from detailed aerial photo-interpretation, large-scale resource maps and extensive fieldwork. Also contains Land Use Capability (LUC) assessments for each of the polygons described	Unknown	NZMG	BML	1:50,000	Unknown
Ohiwa Visual Catchment Ridgelines	Ohiwa Visual Catchment Ridgelines	Unknown	NZTM	BML	1:50,000	Unknown
Parcel	New Zealand coverage of land parcels.	Feb 2010	NZTM	BML	1:5,000	Feb 2010

Short name	Description	Date / version	Projection	Source	Accuracy	Supply date
QE2_covenants	Inventory of Registered, Formalised and Approved QEII Open Space Covenants The digital layer of QEII covenant boundaries has been compiled from various sources around the country, including regional and district councils, DOC conservancies and surveyors. Funding from TFBIS in 2005 enabled QEII to sub-contract the digital capture of covenant boundaries from survey plans for the remaining parts of the country. Since 2005, new covenant boundaries are supplied directly to QEII from the surveyors who produce the survey plans. It should be noted that the digital boundaries of the covenants are a graphic representation only and should not be taken as the definitive covenant boundary.	November 2011	NZTM	QE2 National Trust	1:50,000	17 November 2011
Roads	New Zealand coverage of cadastral based road centrelines.	Feb 2010	NZTM	BML	1:5,000	Feb 2010
Topodata	New Zealand coverage of the NZMS260 digital data that make up the map series.	Version 15	NZTM	Ollivier and Co	1:50,000	2008
Topography raster (Topo50)	The Topo50 map series provides topographic mapping for the New Zealand mainland and Chatham Islands at 1:50,000 scale	Edition 1.0, September 2009	NZTM	LINZ	1:50,000	September 2009
Topography raster (Topo250)	The Topo250 map series provides topographic mapping for the New Zealand mainland and Chatham Islands at 1:250,000 scale	Edition 1.0, September 2009	NZTM	LINZ	1:250,000	September 2009

Short name	Description	Date / version	Projection	Source	Accuracy	Supply date
Western Bay of Plenty District Council Conservation Lot Covenants	Inventory of Registered, Formalised and Approved Covenants relating to features protected under the provisions of historic and current versions of the Western Bay of Plenty District Plan relating to conservation lots.	15 November 2011	NZTM	WBOPDC		15 November 2011
Whakatane District Council ONFL	Whakatane District Council outstanding Natural Feature and Landscape, proposed District Plan	Unknown	NZTM	WDC	1:25,000	Unknown
Whakatane ONFL line	A landscape or feature that has been evaluated as comprising outstanding values for its natural science factors, aesthetic values, transient values, shared and recognised values, Maori values and historical associations.	Unknown	NZTM	BML	1:25,000	Unknown

Overlay Reference Table

ONFLNum	ONFLID	ONFLName
1	ONFL 1	Orokawa Bay
2	ONFL 2	Bowentown Heads
3	ONFL 3	Tauranga Harbour, Waimapu Estuary and Welcome Bay
4	ONFL 4	North Matakana Island Wetlands
5	ONFL 5	Matakana Island (South)
6	ONFL 6	Tanners Point
7	ONFL 7	Ongare Point
8	ONFL 8	Kauri Point
9	ONFL 9	Motuhoa Island
10	ONFL 10	Mauao (Mt Maunganui), Moturiki Island and Motuotau Island
11	ONFL 11	Maketu Estuary and Barrier Spit
12	ONFL 12	Okurei Point
13	ONFL 13	Waihi Estuary
14	ONFL 14	Kohioawa Beach Dunefield and Wetlands
15	ONFL 15	Escarpment and Pohutukawa along the Matata Straights
16	ONFL 16	Matata Wetlands
17	ONFL 17	Piripai Distal Spit
18	ONFL 18	Kohi Point, Otarawairere Bay and catchment
19	ONFL 19	Distal Point of Ohope Spit
20	ONFL 20	Ohiwa Harbour
21	ONFL 21	Uretara Island
22	ONFL 22	Pataua Island
23	ONFL 23	Waiotahi Estuary
24	ONFL 24	Waiotahi Spit and Estuary Mouth
25	ONFL 25	Pohutukawa tunnels over State Highway 2 at Waiotahi
26	ONFL 26	Tarakeha (Opape)
27	ONFL 27	Haurere Point
28	ONFL 28	Pehitairi Point
29	ONFL 29	Haumiaroa Point
30	ONFL 30	Whituare Bay
31	ONFL 31	Maraenui Escarpment (Whituare Bay)
32	ONFL 32	Motu River Mouth

ONFLNum	ONFLID	ONFLName
33	ONFL 33	Orangoihunui Point, Whitianga Bay to Ohae Point
34	ONFL 34	Motunui Island and Associated Reefs
35	ONFL 35	Whanarua Bay
36	ONFL 36	Ruakokere River Mouth
37	ONFL 37	Oruaiti Beach, offshore rocks and Waikanapanapa cliffs
38	ONFL 38	Whangaparaoa dunefield, weland and estuary
39	ONFL 39	Kopongatahi Point
40	ONFL 40	Cape Runaway
41	ONFL 41	Steep coastal hills between Cape Runaway and Lottin Point
42	ONFL 42	Karewa Island and sub-tidal context
43	ONFL 43	Tuhua (Mayor Island) including sub-tidal landscape/seascape
44	ONFL 44	Motiti Island
45	ONFL 45	Moutohora Lands (Whale Island)
46	ONFL 46	Whakaari (White) Island and associated sub-tidal and surface islands

SSCENum	SSCEID	SSCEName
1	SSCE-1	Hikurangi
6	SSCE-6	Tetley Road Inlet
10	SSCE-10	Mangawhai Bay
11	SSCE-11	Mangawhai Bay Inlet
12	SSCE-12	Omokoroa
13	SSCE-13	Jess Road
14	SSCE-14	Newnham Road
15	SSCE-15	Waikaraka Estuary
17	SSCE-17	Te Puna Estuary
22	SSCE-22	Oikimoke
24	SSCE-24	Waikareao Estuary 2
25	SSCE-25	Kaitemako Stream Mouth
27	SSCE-27	Ngapeke Road Wetlands
28	SSCE-28	Mangatawa
29	SSCE-29	Rangataua Bay B
30	SSCE-30	Waipu Bay Margins
36	SSCE-36	Tunanui Stream Inlet
39	SSCE-39	Stipa
40	SSCE-40	Kutarere
41	SSCE-41	Pukeruru
43	SSCE-43	Reeves Road Wetlands
44	SSCE-44	Ohiwa Loop Road Saltmarsh
45	SSCE-45	Island near Whangakopikopiko Island
55	SSCE-55	Ouaki Creek Wetlands
57	SSCE-57	Te Awawairoa Stream
61	SSCE-61	Harbour Road
62	SSCE-62	Awaraputuna Stream
64	SSCE-64	Waiotane Stream
65	SSCE-65	Wainui Wetland
68	SSCE-68	Welcome Bay
70	SSCE-70	Blue Gum Bay 2
71	SSCE-71	Tirohanga Point Pohutukawa

SSCENum	SSCEID	SSCEName
72	SSCE-72	Tirohanga Point Beach
74	SSCE-74	Motuopae Island
75	SSCE-75	Waimapu Estuary Walkway
76	SSCE-76	Hairini
77	SSCE-77	Duck Bay
78	SSCE-78	Pukehina
79	SSCE-79	Thornton Road Dunes
80	SSCE-80	Wahieroa Wetland
81	SSCE-81	Orini Stream
82	SSCE-82	Clayton Place
83	SSCE-83	Ohope Dunes
84	SSCE-84	Paparoa Pa Historic Reserve and Surrounds
85	SSCE-85	Williams Wetland
86	SSCE-86	Toritori
87	SSCE-87	Onekawa
88	SSCE-88	Bryans Beach B
89	SSCE-89	Looney's Remnants
90	SSCE-90	Bryans Beach A
91	SSCE-91	Lower Paerata Ridge
92	SSCE-92	Stokes Road Coastal Forest
93	SSCE-93	Hikuwai Beach
94	SSCE-94	Te Matau
95	SSCE-95	Tirohanga Dunes and Wetland
96	SSCE-96	Opape
97	SSCE-97	Maraenui Wetland
98	SSCE-98	Waiokaha Stream Corridor
99	SSCE-99	Tauranga Stream
100	SSCE-100	Oruaiti Wetland
101	SSCE-101	Tutaetaka Island
102	SSCE-102	Cape Runaway Pohutukawa Remnants
103	SSCE-103	Potikirua
104	SSCE-104	Maungahiha

SSCENum	SSCEID	SSCEName
105	SSCE-105	Okurei Point
106	SSCE-106	Tarawera River Raupo Wetland
107	SSCE-107	Walker Road Wetlands
108	SSCE-108	Ngakautuakina Point
109	SSCE-109	Waipapa Estuary Wetland
110	SSCE-110	Omokoroa Wetlands
111	SSCE-111	Steele Road Wetlands A
112	SSCE-112	Tye Park Inlet
114	SSCE-114	Matakana Island Wetlands 3
115	SSCE-115	Opureora Inlet
117	SSCE-117	Hopukiore
118	SSCE-118	Moturiki Island
120	SSCE-120	Whangaparaoa B
121	SSCE-121	Motuhoa Island
122	SSCE-122	Steele Road Wetlands B
123	SSCE-123	Matakana Point
124	SSCE-124	Snodgrass Road Inlet
125	SSCE-125	Islets near Ohakana Island
126	SSCE-126	Hiwarau Pohutukawa
127	SSCE-127	Waitekohe Stream Mouth
128	SSCE-128	Central Matakana Wetlands
129	SSCE-129	Southeastern Matakana Wetlands
130	SSCE-130	Motuopuhi Island
131	SSCE-131	Rereatukahia
132	SSCE-132	Waihi Beach Grey Willow Forest
133	SSCE-133	Hokianga Island
134	SSCE-134	Ohope Pohutukawa Remnants
135	SSCE-135	Waiherehere Road Wetland
137	SSCE-137	Apata Estuary
138	SSCE-138	Waitao Stream
139	SSCE-139	Waihi Estuary Southern Margin
140	SSCE-140	Motuputa Island

SSCENum	SSCEID	SSCEName
141	SSCE-141	Motiti Islets
142	SSCE-142	Taumaihi Island
143	SSCE-143	Motiti Island
144	SSCE-144	Te Rereatukahia
145	SSCE-145	Matahui Road
147	SSCE-147	Rangiwaea Island Foreshore
148	SSCE-148	Motutangaroa Isle Foreshore
149	SSCE-149	Rangiwaea Island Estuary
150	SSCE-150	Rangiwaea Island East
151	SSCE-151	Maketu Estuary Saltmarsh
152	SSCE-152	Elizabeth Wetland
153	SSCE-153	Central Waihi Beach
154	SSCE-154	Waipa Road
155	SSCE-155	Kuka Road Wetlands
156	SSCE-156	Shark Alley to Kaituna Spit Sand Dunes
158	SSCE-158	Wharere Road Wetland
159	SSCE-159	Pukehina Spit
160	SSCE-160	Maketu Road Wader Roost
161	SSCE-161	Kaituna River
162	SSCE-162	State Highway 2
163	SSCE-163	Ruatuna
164	SSCE-164	Ohiwa Scenic Reserve and Surrounds
165	SSCE-165	Oroi
166	SSCE-166	Te Whiorau
167	SSCE-167	Waimanu
168	SSCE-168	Waihau Pohutukawa Remnants
170	SSCE-170	Kopurererua Stream Wetland
171	SSCE-171	Rangiwaea Island Sandspit
172	SSCE-172	Otamarakau-Matata-Whakatane Dunes B
173	SSCE-173	Otamarakau-Matata-Whakatane Dunes C
174	SSCE-174	Ranginui Road

CHPZNum	CHPZID	CHPZName
1	CHPZ-1	Athenree
3	CHPZ-3	Tuapiro
4	CHPZ-4	Matakana Island 2
5	CHPZ-5	Matakana Island 4
6	CHPZ-6	Blue Gum Bay 1
7	CHPZ-7	Katikati Inlet
8	CHPZ-8	Park Road Estuary
11	CHPZ-11	Aongatete Estuary
12	CHPZ-12	Tirohanga Mangroves
13	CHPZ-13	Wainui Estuary
14	CHPZ-14	Te Hopai Island
17	CHPZ-17	Waipapa Estuary
18	CHPZ-18	Otapu Bay
19	CHPZ-19	Opureora
25	CHPZ-25	Wairoa River Wetlands
26	CHPZ-26	Waikareao Estuary 1
27	CHPZ-27	Waimapu Estuary
28	CHPZ-28	Poike
33	CHPZ-33	Whitiwhiti
36	CHPZ-36	Pataua Island Scientific Reserve & Extension
37	CHPZ-37	Motuotu Island Nature Reserve
38	CHPZ-38	Uretara Island
40	CHPZ-40	Hiwarau (Part)
41	CHPZ-41	Waiotahe Estuary
42	CHPZ-42	Bowentown Shellbanks
45	CHPZ-45	Kaituna River Wetlands (Part) and Kaituna River Mouth
46	CHPZ-46	Waewaetutuki
48	CHPZ-48	Tuapiro Estuary Sandspit
49	CHPZ-49	Whakatane Estuary
50	CHPZ-50	Ohope Spit
52	CHPZ-52	Matakana Wetlands C
53	CHPZ-53	Ohiwa Spit

CHPZNum	CHPZID	CHPZName
54	CHPZ-54	Tauwhare
55	CHPZ-55	Kauri Point
58	CHPZ-58	Whangakopikopiko Island
59	CHPZ-59	Omarumutu
60	CHPZ-60	Orokawa (Part)
61	CHPZ-61	Motu-Waikakariki River (Part)
62	CHPZ-62	Whangaparaoa Beach and River Mouth
64	CHPZ-64	Matahui Point Intertidal flats
65	CHPZ-65	Bowentown Heads
68	CHPZ-68	Matakana Island 1
69	CHPZ-69	Matua Estuary - Yorke Park
78	CHPZ-78	Otira Sand Dunes
79	CHPZ-79	Papamoa Sand Dunes
80	CHPZ-80	Kaituna Sand Dunes and Wetland
81	CHPZ-81	Maketu Spit and Wildlife Management Reserve
82	CHPZ-82	Arawa Wetland
86	CHPZ-86	Otamarakau-Matata-Whakatane Dunes A
88	CHPZ-88	Ohinekoao (Part)
89	CHPZ-89	Matata Scenic Reserve (Part)
90	CHPZ-90	Kohika Wetland (Part)
91	CHPZ-91	Kohi Point
92	CHPZ-92	Ohope Scenic Reserve and Extension (Part)
93	CHPZ-93	Onekawa Forest Remnants
94	CHPZ-94	Waiotahe Spit
95	CHPZ-95	Waiotahe Beach
96	CHPZ-96	Waioweka Estuary (Part)
97	CHPZ-97	Tirohanga Pa
98	CHPZ-98	Haurere and Opape Headlands (Part)
101	CHPZ-101	Hawai - Motu River (Part)
102	CHPZ-102	Houpoto Swamp (Part)
103	CHPZ-103	Haparapara River-Te Kaha (Part)
105	CHPZ-105	Whanarua (Part)

CHPZNum	CHPZID	CHPZName
107	CHPZ-107	Raukokore Mouth (Part)
109	CHPZ-109	Te Ranginui-Oruaiti-Whangaparaoa-Tapuaeharuru (Part)
113	CHPZ-113	Tikirau
115	CHPZ-115	Otarawhata Island
116	CHPZ-116	Karewa Island
117	CHPZ-117	Tuhua (Mayor Island)
122	CHPZ-122	Motunau Island
123	CHPZ-123	Rurima, Moutoki and Tokata Islands
124	CHPZ-124	Moutohora (Whale Island)
125	CHPZ-125	Te Paepae o Aotea (Volkner Rocks)
126	CHPZ-126	Whakaari (White Island)
128	CHPZ-128	Bowentown Sand Dunes and Beach
129	CHPZ-129	Matakana Wetlands D
130	CHPZ-130	Motuotau Island
131	CHPZ-131	Wainui Estuary Wetlands
134	CHPZ-134	Tahunamanu Island
136	CHPZ-136	Oscar Reeve Scenic Reserve and Extension
138	CHPZ-138	Egg Island Sandbank
140	CHPZ-140	Mauao 1
141	CHPZ-141	Mauao 2
142	CHPZ-142	Matakana Wetlands B
144	CHPZ-144	Ongare
145	CHPZ-145	Matakana Wetlands A
157	CHPZ-157	Rangataua Bay A