

**Natural Character Areas**

1. Port Waikato
  - a. Okariha Sand Spit
2. Opura
  - a. Nihonui Coast
  - b. Huriwai, Waikawau, Otangaroa, Kaawa, Waikorea, Waimai, Kotuku and Te Kaha Point Dunes
3. Whaingaroa
  - a. Rangitoto Point
  - b. Motukokako Point, Te Kotuku, Waingaro, Pirere Point, Paroa Point and The Finger
4. Karioi
  - a. Karioi
  - b. Ruapuke and Rahinui Beaches
5. Aotea
  - a. Oioroa
  - b. Tauranga Bush, Te Pahi Point, Pirau Bush

**Outstanding Natural Character**

6. Margins of Aotea Harbour Outstanding Natural Character Attributes (Level 4)

Assessment of Outstanding Natural Character Areas			
	Attributes	Descriptors	Spectrum of naturalness*
NATURAL SCIENCE	<b>Terrestrial Abiotic Systems</b>	<ul style="list-style-type: none"> <li>▪ Climatic influences (wind, rain, exposure);</li> <li>▪ Geomorphology and identification of different types of landforms (i.e. peninsulas, cliffs, dunes, wetlands);</li> <li>▪ Terrestrial coastal processes, including erosion, river mouth processes including sedimentation (within the terrestrial zone);</li> <li>▪ Freshwater processes.</li> </ul> <p>Including RPS Assessment criteria: Landforms (Geology/ Geomorphology) Natural Processes (abiotic)</p>	The evident intactness of the abiotic systems. The degree (very high to very low) to which physical modifications such as built structures, road cuts, earthworks and reclamation works affect this abiotic attribute.
	<b>Terrestrial Biotic systems</b>	<ul style="list-style-type: none"> <li>▪ The margins of estuaries, wetlands and terrestrial areas in Zone B including the intactness of their natural ecological processes, patterns and elements;</li> <li>▪ Extent of freshwater communities;</li> <li>▪ Land cover and associated land use, including the composition, distribution and condition of land cover and the presence of indigenous/exotic species;</li> <li>▪ Presence of indigenous fauna.</li> </ul> <p>Including RPS Assessment criteria: Vegetation Cover &amp; Type; Land Uses/ Activities/ Structures Habitat Value Natural Processes (biotic)</p>	<p>-The degree (very high to very low) to which modifications affect this biotic attribute. Influences include the presence of exotic species on native communities, physical structures such as infrastructure, housing, roading, tracking, reclaimed land, stop banks, as well as commercial forestry, agricultural and viticulture land use that reduce the naturalness of the biota;</p> <p>- This attribute also includes modifications to freshwater systems, including channelizing watercourses, stop banks, culverts, dams etc. which affect freshwater biota.</p>
HUMAN	<b>Terrestrial Experiential</b>	<ul style="list-style-type: none"> <li>▪ The experience in seeing, feeling and perceiving the Coastal Significance and Active Coastal Interface;</li> <li>▪ Aromas, visual and scenic, auditory, sense of wildness, remoteness, isolation, natural darkness of the night sky;</li> <li>▪ Ephemeral biotic activity (i.e. seasonality of flora, presence of birds);</li> <li>▪ Ephemeral human activity affecting the naturalness (such as recreation, commercial activities);</li> <li>▪ Note, this attribute does not include heritage elements.</li> </ul> <p>Including RPS Assessment criteria: Wilderness/ Remoteness; Experiential Attributes; Context/ Setting Transient/ Dynamic attributes Night-time values</p>	The degree (very high to very low) to which physical and biotic modifications affect the naturalness experienced. Influences reducing naturalness include the presence of physical structures including ports, reclaimed land, infrastructure, roading, lighting, industrial noises and non-natural aromas;

\* Each Coastal Terrestrial Area is measured on the spectrum of naturalness (degree of human modifications) to each attribute from Very High to Very Low, then an overall judgement is made. The degree of physical and experiential naturalness is related to the location's context.

<b>Port Waikato</b>	
Overall Natural Character Rating: <b>moderate</b>	
<b>Overview:</b>	This Coastal Terrestrial Area extends from the northern part of the district's West Coast southwards to Port Waikato and includes the Waikato River mouth and Okariha Sand Spit. Typically, the beach profile ends abruptly with a steep coastal cliff of variable height which represents the actively eroding face of very large old dunes that are tens of metres high. Settlement of the northern coastal cliffs is centred around Karioitahi Beach with the next settlement being Port Waikato and Sunset Beach. Access to the northern coastal cliffs is limited to Karioitahi Beach and the predominant land use is agricultural grazing for dairy, sheep and drystock farming. Sand mining operations extend along the northern edge of the Waikato River mouth and are encompassed in productive forestry. Further south along the Waikato River the Coastal Marine. Area extends into the river wetlands and islands which contain numerous 'maimai' for duck hunting and stands for whitebaiting activities.
<b>Abiotic</b> <i>(Moderate to High)</i>	<ul style="list-style-type: none"> <li>▪ The Port Waikato Coastal Terrestrial Area is characterised by a narrow beach backed by steep bluffs that typically rise from 120m to 190m above sea level. The cliff faces are subject to extensive erosion with predominantly pasture forming the vegetation cover along cliff tops and plateau.</li> <li>▪ Sand country is common along this coastal unit and is apparent with migrating sand dunes, sand sheets and blowouts along the cliff faces and tops.</li> <li>▪ Pockets of narrow dunes extend along the foot of the coastal cliffs with modification associated with vehicle access tracks.</li> <li>▪ Ephemeral streams, prevailing winds and high energy waves subject this area of the coast to considerable erosion.</li> <li>▪ To the immediate north of the Waikato River mouth the sand dunes are steep and modified through productive forestry use accompanied with sand mining operations.</li> </ul>
<b>Biotic</b> <i>(Moderate to Low)</i>	<p>Land cover analysis: Almost 48% of the land cover is rural production land with a further 22% being plantation forestry and 3% being a sand mine. Of the remainder, 15% is estuarine open water, lake/pond, and sand/gravel, and 2% is urban area. Only 8% is indigenous vegetation comprising forest, wetland or manuka/kanuka scrubland. There is a very small area (&lt;1%) of gorse/broom.</p> <ul style="list-style-type: none"> <li>▪ The biotic environment is strongly influenced by abiotic environment processes both historically and today. The narrow high energy beach environment actively erodes the dunelands, which terminate in a steep and mobile dune face.</li> <li>▪ Bare sand occurs where severe winds and salt spray have completely removed vegetation leaving exposed sand.</li> <li>▪ At the southern end of the Coastal Terrestrial Area, the Waikato River provides a dominant fluvial process, generating a flat floodplain and shifting sequences of mudflats, islands, saltmarshes, and wetlands.</li> <li>▪ Today, coastal vegetation is very limited and typically found only on the coastal dune face and providing variable cover in pasture, depending on the land management regime.</li> <li>▪ The vegetation is highly modified by vegetation clearance and grazing with only less palatable species present or those capable of surviving on the mobile coastal cliff environment.</li> <li>▪ The streams discharging to the coast are generally first-order streams with very small catchments. Because of the sand substrate, most are likely to be ephemeral or intermittent, with pools persisting in deeper gullies. Where gullies have incised more deeply to bedrock, streams may be perennial and provide a more stable aquatic habitat.</li> <li>▪ The streams themselves are likely to be affected by the lack of riparian cover, with their small size making them particularly vulnerable to temperature impacts. They will also be impacted by livestock access, erosion, sedimentation, enrichment, and a lack of suitable instream habitat (e.g. woody debris and aquatic plants).</li> <li>▪ The Waikato River is home to a diverse assemblage of freshwater and saltwater fish taking advantage of the rich resources of the Waikato River delta. The delta is known for whitebait fishery and provides a habitat, nursery, and conduit for migrating freshwater species.</li> <li>▪ The Delta is also home to a multitude of exotic and indigenous waterfowl, marsh birds, and shorebirds using the various mud flat, sand flat, saltmarsh and wetland habitats for feeding and breeding.</li> <li>▪ Port Waikato dunes provide nesting and roosting areas, and the area is on the flightpath for migratory shorebirds. Variable oystercatchers' winter at Port Waikato, New Zealand dotterels are permanently resident and Caspian terns breed there.</li> <li>▪ The river mouth also offers temporary habitat for seals, dolphins, and sharks.</li> </ul>
<b>Experiential</b> <i>(Moderate)</i>	<ul style="list-style-type: none"> <li>▪ Largely in private ownership, access to the coastal edge is limited to Karioitahi Beach to the north and Port Waikato and Sunset Beach to the south of the Waikato River Mouth.</li> <li>▪ This area of the coast is remote and dramatic in its form, with the natural processes of the coast dominating the coastal experience.</li> <li>▪ Human modification is apparent through development of dwellings and accommodation around Karioitahi Beach and productive farming.</li> <li>▪ Whilst dramatic in its remoteness and experience of the coastal processes these modifications are apparent and recognisable.</li> <li>▪ Further south, modification of the coastal edge increases with productive forestry and sand mining to the north of the Waikato River Mouth. The settlement of Port Waikato and Sunset Beach provide the southernmost access to the coastal edge for this Coastal Terrestrial Area.</li> </ul>
<b>Port Waikato Specific Characteristics at Level 4</b>	

Okariha Sand Spit	
<b>Opura</b>	
	processes remain unmodified. Largest example of river mouth dune system along the Waikato West coast.
	Native dune species are prevalent mixed with exotic weed species.
	Highly dynamic and dominant coastal processes with a large dune system that extends in a full sequence from the coastline to the river edge.
	A strong sense of the natural systems of the river are apparent through the intertidal movements and sand accretion and erosion at the distal end of the sand spit.
<b>Additional Comments</b>	
	<ul style="list-style-type: none"> <li>▪ Dunes remain intact with minor patterns of modification from vehicle and pedestrian movement throughout.</li> <li>▪ Forms an integral part of the coastal dune and cliff faces of the northern extent of the Waikato and Waikato River system.</li> </ul>

Overall Natural Character Rating: <b>Moderate</b>	
Overview:	<p>This Coastal Terrestrial Area extends along the exposed, predominantly linear, coastline between the Waikato River Mouth and Raglan Harbour (Whaingaroa). This Coastal Terrestrial Area is principally undulating, where coastal, fluvial and tectonic processes have eroded the coastal edge to form a series of cliffs. Black sands dominate the beach and, where watercourses interact with the coastal environment, the land becomes flatter and dune-like. In some areas dunes and sand sheets are located on upper terraces and elevated well above the coastal edge. Most of the land is grazed, with the northern and steeper areas of the Coastal Terrestrial Area reverting to native bush cover. The remainder of the area is dominated by agricultural grazing as close to the coastal edge as possible.</p> <p>Public access is virtually impossible, with no public access gained through private land. The beach access is limited due to the rocky coastline and steep cliff faces, and sandy beaches are located around stream and gully floors that meet the coast.</p> <p>Key coastal characteristics include: Relatively straight, narrow stretch of coastline, black sand on beaches, steep coastal cliffs along the majority of the coastline, back dunes, flatter land associated with the mouths of watercourses where sand accumulation has occurred, grazing. Beyond the coastal environment the land continues to gently rise in elevation, creating a crumpled and hilly pastoral area. Settlement is restricted to small farmsteads and access predominantly is gained via private tracks.</p>
<b>Abiotic</b> (Moderate)	<ul style="list-style-type: none"> <li>▪ Substantial sand dunes with high iron content have formed around the Kaawhia and Aotea Harbours.</li> <li>▪ This coastline contains significant geological sites and features including the coastal cliffs of Port Waikato between Huriwai River and Waikawau Stream, Waiwiri Beach and Ngatutura Point.</li> <li>▪ Geopreservation Sites include: Huriwai-Waikawau Coastal Section Jurassic/Oligocene unconformity (C3), Waiwiri Beach unconformity and Basal Waitemata group sediments (C3), Kaawa Creek – Ngatutura Bay section (B3) and Ngatutura Point dissected eruptive centre (C3).</li> <li>▪ Key features of this coastal landscape include the sand sheets and dune incursions that extend inland and up the coastal escarpments. Pockets of native bush cover that extends toward the coastal edges reflect components of the pre human occupation coastal landscape.</li> </ul>
<b>Biotic</b> (Moderate to Low)	<p>Land cover analysis: Almost 80% of the land cover is rural production land, and there is very little plantation forest. There is almost 15% indigenous vegetation cover, with most being manuka/kanuka or forest, and very small areas of flaxland or estuarine vegetation. Of the remainder, almost 3% is sand or landslide, almost 2% is gorse/broom or other scrub, less than 1% is estuarine open water, lake/pond, or river, and sand/gravel, and there is no urban area.</p> <ul style="list-style-type: none"> <li>▪ The beach is narrow and high energy, actively eroding the coastal cliffs of mixed sedimentary rock and lava formations.</li> <li>▪ Beyond the cliffs the underlying rock strata is from older more stable land units rather than dunes, although dunes are present on cliff tops that are elevated tens to hundreds of metres above the sea.</li> <li>▪ Indigenous coastal vegetation is limited and typically found only on the narrow coastal cliffs and in the isolated patches of regenerating forest. The largest forest patch is Te Tehe Bush south of Port Waikato, and this is also the only forest remnant that extends to the coast.</li> <li>▪ The streams discharging to the coast are generally first- or second order perennial streams, along with eight larger waterways with catchments extending beyond the coastal zone.</li> <li>▪ In some gullies, raupo dominated wetlands persist, some covering relatively large areas, and isolated kahikatea specimens point to the swamp forest that would once have existed.</li> </ul>
<b>Experiential</b> (Moderate to Low)	<ul style="list-style-type: none"> <li>▪ Inaccessible to the public the majority of this Coastal Terrestrial Area forms a remote part of the West Coast. No public roads extend to the coast, with some farm tracks extending along the coast with sporadic access to the coastal edge.</li> <li>▪ Human modification is apparent through activities mainly associated with productive farming.</li> <li>▪ The northern end of the area includes native vegetation cover and a rocky shoreline that is dynamic and dominated by natural processes and patterns. Whilst further south the coastal environment is largely farmed to the immediate coastal edge where possible. The large iron sand sheets that extend up into the coastal plateau and stream mouths are highly expressive of the coastal processes that occur in this high energy coastal environment.</li> <li>▪ There is a strong sense of remoteness along this coast with the natural processes dominating the experience. The natural patterns are evident at many scales, with evidence of coastal erosion at large and small scales. The natural elements, including biotic cover, is limited to the northern and southern end of the coast and the immediate coastal edge where farming activities have been avoided. These areas provide a strong sense of naturalness or perceived naturalness for the user.</li> </ul>

Nihonui Coast	
Rating:	High
Key Values	Regenerating coastal vegetation sequencing to coastal edge with some areas of grassland. Abiotic processes dominate the coastal cliffs with exposed sedimentation layers evident and no modification along the coastal edge.
<b>Additional Comments</b>	
<ul style="list-style-type: none"> <li>Regenerating coastal bush vegetation interspersed with some modification including access tracks.</li> </ul>	
Huriwai, Waikawau, Otangaroa, Kaawa, Waikorea, Waimai, Kotuku and Te Kaha Point Dunes	
Rating	High
Key Values	Dynamic dune incursion system extending up the stream valley systems. Coastal processes are dominant with exposed iron sand sheets atop plateau with exposed coastal cliffs. Low lying dunes are evident on valley floor with streams and rear dune wetland systems remaining intact. Remote with private access gained only via farmland to the areas
<b>Additional Comments</b>	
<ul style="list-style-type: none"> <li>Little modification on the dune system largely as a result of dominant coastal processes. Erosion and tectonic processes evident and dominant along the coastal edge.</li> </ul>	

<b>Whaingaroa</b>	
<b>Overall Natural Character Rating: Moderate</b>	
<b>Overview:</b>	<p>This Coastal Terrestrial Area surrounds Raglan/Whaingaroa Harbour and includes the settlement of Raglan and the gently undulating pastoral grazing land. The harbour itself extends for a long distance inland and has a largely unmodified landform, with a narrow neck and mouth relative to the size of the harbour. Surrounding watercourses drain into the harbour and, as a result, the margins are highly indented and alluvial. Raglan or Whaingaroa Harbour supports a number of areas of indigenous vegetation, which are principally located within the inner parts of the harbour. Access to the harbour is provided by State Highway 23 and the Ohautira Road. The Paritata Peninsula is a significant prominent focus central to the harbour, as is the large sand dune on the northern side of the harbour mouth.</p> <p>Key coastal characteristics include: The settlement of Raglan; highly indented estuarine coastline contained by undulating rural pastoral land; noted areas of indigenous bush, the prominent feature of Karakaringa on the Paritata Peninsula; the numerous watercourses that drain the surrounding coastal context and their associated river channels; largely undeveloped. Beyond the coastal environment, the coastal context contains the pastoral hinterland of rural Waikato including the largely indigenous area of Kokako.</p>
<b>Abiotic</b> <i>(Moderate)</i>	<ul style="list-style-type: none"> <li>▪ Whaingaroa Harbour covers 33km<sup>2</sup> with a catchment area of 525km<sup>2</sup>. With 70% of the harbour being intertidal and exposed at low tide a number of the upper arms of the catchment from the upper reaches of the intertidal zone.</li> <li>▪ The north harbour mouth forms an extensive sand dune system that is rich in ironsands along with dune dammed lakes. The dune system transitions to an inner harbour landscape of headlands and embayments that are a mix of native bush and agricultural grazing land cover types. The land form comprises gentle to moderately steep rolling landscape of headlands and</li> <li>▪ Rivers running into the harbour include Oporoturu River, Waingaro River, Tawatahi River and Waitetuna River. The Waingaro River is one of the largest sources of sediment for the Whaingaroa Harbour.</li> </ul>
<b>Biotic</b> <i>(Moderate to Low)</i>	<p>Land cover analysis: The total land area of the Whaingaroa Coastal Terrestrial Area is 7,988ha. Almost 70% of the land cover is rural production land with a further 2% being plantation forestry and cropland. Twelve percent is indigenous vegetation, principally manuka/kanuka with a small amount of wetland and indigenous forest. Of the remainder, 3% is lake/pond/river and sand/gravel/rock, 4% is urban area and parkland, and 4% is gorse/broom.</p> <ul style="list-style-type: none"> <li>▪ The greywacke landform that defines Whaingaroa Harbour is relatively stable and subject to long term processes of fluvial erosion and harbour sedimentation. Apart from isolated patches of regenerating shrubland or reverting gorse, there is very little indigenous vegetation cover. Over the past 20 years there has been significant effort locally to replant the riparian margins of the catchment feeding the harbour as part of the Whaingaroa Environment Catchment Plan.</li> <li>▪ Most streams discharging to the Harbour are generally first- and second-order perennial streams, but 12 are larger waterways with catchments extending well beyond the coastal zone. The streams are generally incised in gully networks with relatively unmodified channels. Many have been fenced from livestock and planted through the Whaingaroa Harbourcare programme, although most of the steep and less accessible first- and second-order streams remain unprotected.</li> <li>▪ Farm tracks and road culverts may present some barriers to fish passage, but most streams offer a relatively natural habitat for a diverse range of freshwater fish, and access will be possible for fish migrating to and from Whaingaroa Harbour.</li> </ul>
<b>Experiential</b> <i>(Moderate)</i>	<ul style="list-style-type: none"> <li>▪ Large parts of the northern harbour margins are in private ownership and are inaccessible to the public.</li> <li>▪ Modification to the harbour margins is consistent with rural farm dwellings, structure and jetties occupying the shoreline. The southern extent of the harbour is heavily modified with the settlement of Raglan which includes wharves, bridges, residential settlement and industrial activities.</li> <li>▪ Human modification is apparent in the northern and western margins of the area through activities mainly associated with productive farming. Despite the modification, the many arms of the harbour create a sense of isolation and visual disconnect with the modified areas of the Coastal Terrestrial Area.</li> <li>▪ Headlands and embayments in the northern and western areas of the harbour that are covered in native bush create a strong sense of remoteness along this coast, with the natural processes dominating the experience.</li> <li>▪ The natural patterns are evidence at many scales with evidence of coastal erosion more evident along the modified areas of the coastal terrestrial area. The northern head of the harbour mouth is expressive of the natural processes, particularly during high winds.</li> </ul>

Whaingaroa Specific Characteristics at Level 4	
<b>Rangitoto Point</b>	
<b>Rating</b>	High
<b>Key Values</b>	The dynamic dune system extends from coastal edge to the inner harbour with natural patterns remaining intact. Vegetation cover is a mix of native and weed species. The natural dune processes are evident throughout and most apparent along the margins of the feature. A moderate sense of remoteness is evident within the feature.
<b>Additional Comments</b>	
<ul style="list-style-type: none"> <li>Farming around the point and settlement along the inner harbour margins introduce modification to the natural abiotic and biotic sequencing of the dune system.</li> </ul>	
<b>Motukokako Point, Te Kotuku, Waingaro, Pirere Point, Paroa Point and The Finger</b>	
<b>Rating</b>	High
<b>Key Values</b>	Biotic values of comprehensive areas of regenerating native bush along the inner harbour headlands. Interspersed with estuarine vegetation including sequencing from coastal bush, to saltmarsh to mangrove habitats.
<b>Additional Comments</b>	
<ul style="list-style-type: none"> <li>Margins of the areas are defined by adjoining land use rather than natural patterns. Modification is largely in the form of access tracks and grazing of wild stock and pests underneath the canopy.</li> </ul>	



<b>Karioi</b>	
Overall Natural Character Rating: <b>Moderate</b>	
<b>Overview:</b>	<p>Located immediately south of Raglan (Whaingaroa) Harbour and north of Aotea Harbour, this Coastal Terrestrial Area includes the northerly and westerly flanks of the extinct volcano of Karioi and the predominantly straight coastal duneland associated with Ruapuke Beach. Within the crumpled topography of the lower slopes of Karioi is the Te Toto Gorge, where a walking track extends in elevation to the top of the volcano.</p> <p>The majority of this Coastal Terrestrial Area is pastoral farming with areas around Karioi being predominantly indigenous.</p> <p>Key coastal characteristics include: The indigenous vegetated lower slopes of Karioi; the Te Toto Gorge area; the predominantly straight coastal edge of the southern section of this Coastal Terrestrial Area and its associated dunelands; predominantly pastoral land use with indigenous vegetation flanking parts of Karioi; access being provided by the Whaanga Road; any settlement associated with farms and satellite houses located off the small number of roads. Beyond the coastal environment, the coastal context to the north comprises the vegetated elevated slopes of Karioi. To the south are the pastoral undulating lands of Ruapuke.</p>
<b>Abiotic</b> <i>(Moderate to High)</i>	<ul style="list-style-type: none"> <li>▪ This Coastal Terrestrial Area includes the extinct volcano of Karioi in the north, and the ancient sands and siltstones in the south. Karioi forms a backdrop to the Whaingaroa Harbour and settlement of Raglan. It is dissected by deep ravines that radiate from the summit and terminate, on the western side, in towering coastal cliffs (Woody Head) that expose basaltic lava interbedded with volcanic fragmental material penetrated by andesitic dikes.</li> <li>▪ A particular feature of this is Te Toto Gorge, a geopreservation site. This feature comprises up to 15 lava flows which make up the 150m cliffs of the Gorge which display many large augite crystals up to 15mm. Other features of the Karioi volcanics include Papanui Point and a lava flow section at Whale Bay.</li> <li>▪ Topographically the area is rugged with a rocky shoreline around Karioi before transitioning to steep cliffs and ironsand beaches further south. The inland coastal area is undulating and expressive of the coastal erosion processes occurring along the west coast. To the south, beyond the volcanics of Karioi, are the beach and dune deposits containing titanomagnetite (iron sands).</li> </ul>
<b>Biotic</b> <i>(Moderate)</i>	<ul style="list-style-type: none"> <li>▪ Land cover analysis: The total land area of the Karioi Coastal Terrestrial Area is 3,218ha. More than 51% of the land cover is rural production land. Indigenous vegetation covers over 42% and is principally comprised of indigenous forest, with small proportions of flaxland, manuka/kanuka and other scrub. Of the remainder, 3% is sand/gravel, 1% is gorse/broom, and &lt;1% is urban area.</li> <li>▪ Both the volcanic landform of Karioi and the sedimentary rock strata to the south are relatively stable and subject to long term processes of fluvial and coastal erosion. The Karioi forests are a dominant feature of the Coastal Terrestrial Area, elsewhere there is very little indigenous vegetation cover, apart from isolated small patches of regenerating forest and the coastal cliff communities. However, threatened plants Hebe speciose and Cook's scurvy grass have been reintroduced to the Te Toto Gorge.</li> <li>▪ Waikato Regional Council identifies parts of the Karioi forest and riparian areas as key ecological sites, and the remaining area is protected by scenic reserve and conservation park status. There are also several QEII covenant areas. Waikato Regional Council also identifies the Matawha Point coastal cliffs as a key ecological site, and part of this area, along with most of the adjacent headland north of Ruapuke Stream, is also protected by a QEII covenant. The coastal cliffs from Woody Head to the southern side of Papanui Point are protected by a marginal strip.</li> <li>▪ Almost all streams discharging to the coast are first- and second-order perennial streams, and only two have catchments extending beyond the coastal zone. The streams follow the topography, and are incised in gully networks with relatively unmodified channels, except close to roads. Few have been fenced from livestock, although most of those on Karioi benefit from the indigenous forest cover and reserve status, and will have very high ecological values.</li> <li>▪ Like Opura, depending on their location and stream size, the catchments either have narrow floodplains close to sea level, or steeper incised catchments dominated by gullies elevated well above sea level and discharging to the coast via waterfalls.</li> </ul>
<b>Experiential</b> <i>(Moderate to High)</i>	<ul style="list-style-type: none"> <li>▪ Residential and rural residential settlement are focused to the coastal edge near Whale Bay, with some properties extending along the spurs and ridges of Karioi footslopes. The coastal margin of Karioi is highly expressive of the natural processes and patterns occurring along the coastline and on the mountain.</li> <li>▪ Fingers of native bush extend down the valleys toward the coast providing connection of the native coastal bush to the shoreline.</li> <li>▪ DOC walking tracks extend around the coastline, with DOC facilities located along the lower coastal slopes of Karioi. Modification is apparent along the lower slopes with agricultural grazing interspersed along the shoreline of Karioi. Further modification along the lower footslopes is in the form of access tracks, both for pedestrians and off-road vehicles.</li> <li>▪ Further south the landform transitions back too low to moderate rolling landscape with remnant dune systems that extend inland. Farming landuse is dominant and coastal vegetation patterns relatively sparse.</li> <li>▪ The natural patterns and elements dominate only in areas where agricultural land use is difficult to achieve.</li> <li>▪ Access to this area is limited to private access only, with public access only to Ruapuke Beach.</li> </ul>

Karioi Specific Characteristics at Level 4	
<b>Karioi</b>	
<b>Rating</b>	Very High
<b>Key Values</b>	Volcanic cliff faces extending steeply toward summit of Karioi. The natural processes are evident with the volcanic formations evident from coast to summit. Biotic elements comprise dominant native bush cover extending down to the coastal edge and along the cliffs. A highly remote experience dominated by the natural processes occurring.
<b>Additional Comments</b>	
<ul style="list-style-type: none"> <li>▪ Modification is interspersed amongst the vegetation patterns with open grazing areas, vehicle and walking tracks.</li> </ul>	
<b>Ruapuke and Rahinui Beaches</b>	
<b>Rating</b>	High
<b>Key Values</b>	Valley floor dune systems comprising elevated dune sheets and dune systems extending inland to meet wetland systems. Vegetation cover is a good example of sequencing from coastal dune to coastal shrub species. The entire beach and coast is remote with limited public access.
<b>Additional Comments</b>	
<ul style="list-style-type: none"> <li>▪ Full sequencing of dune system is interrupted by adjoining land use of farming. Areas not farmed are largely associated with highly dynamic coastal processes.</li> <li>▪ Public access is gained off the access road near the Ruapuke Motor Camp.</li> </ul>	

<b>Aotea</b>	
<b>Overall Natural Character Rating: High</b>	
<b>Overview:</b>	<p>This Coastal Terrestrial Area encompasses the land associated with both the predominantly sheltered harbours of Aotea and Kaawhia. These two prominent inlets retain very different characteristics. Aotea Harbour features the Aotea dune fields, which are considered a geopreservation site of national importance.</p> <p>Key coastal characteristics include: Impressive dunelands associated with the northern mouth of Aotea Harbour; highly indented Coastal Terrestrial Area, especially around Kaawhia Harbour, land predominantly used for pastoral land use. However, significant tracts of indigenous areas are apparent with the settlement of Aotea and its limited access, which provides a relatively sheltered coastal experience. Beyond the coastal environment is the rural undulating hinterland of Waikato, where numerous small roads connect the many farmsteads. Some 18km to the east of both harbours is the indigenous vegetated extinct volcano of Pirongia, which clearly punctuates the Waikato rural landscape.</p>
<b>Abiotic</b> <i>(High)</i>	<ul style="list-style-type: none"> <li>▪ The principal feature of this Coastal Terrestrial Area is the Aotea Harbour which is a drowned valley system following post glacial Aranuian sea level rise, and has also been influenced by numerous faults. Much of the sands contain a high iron content with a number of geopreservation sites associated with this area.</li> <li>▪ The principal site in Aotea Harbour is the dune fields at the northern mouth. This impressive, nationally significant and well-defined landform of mobile sands is the largest example on the northwest coast</li> </ul>
<b>Biotic</b> <i>(Moderate to High)</i>	<ul style="list-style-type: none"> <li>▪ Land cover analysis: The total land area of the Aotea and Kaawhia Coastal Terrestrial Area is 16,462ha. Almost 50% of the land cover is rural production land with a further 10% being plantation forestry. Indigenous vegetation forms nearly 32% of the cover, principally comprised of forest and manuka/kanuka scrub, with small areas of wetland and estuarine vegetation. Of the remainder, 5% is estuarine open water, lake/pond, and sand/gravel. Gorse/broom covers 2% and there are also very small areas (&lt;1%) of iron sand mine, urban area/park and cropland.</li> <li>▪ Like Whaingaroa Harbour, the Aotea Harbour landform is relatively stable and subject to long term processes of fluvial erosion and harbour sedimentation. The exception is the dynamic harbour mouths and associated dunelands.</li> <li>▪ The area around Aotea Harbour has a substantial cover of regenerating indigenous forest down to the harbour margins. Many of the Aotea Harbour indigenous forests provide complete vegetation sequences from harbour fringe rushlands/sea meadows to coastal and lowland forest. Waikato Regional Council identifies seven areas of regenerating forest and indigenous scrubland areas around Aotea Harbour as key ecological sites covering some 930ha.</li> <li>▪ The vast majority of streams discharging to the harbours are first- and second-order perennial streams. Some streams appear to have been fenced from livestock and allowed to regenerate with dense raupo wetlands. However, although most streams appear to be unfenced, many have extensive wetlands along much of their downstream reaches indicating that water levels are high enough to preclude stock grazing and wetland vegetation is permanent. Some of these also have forested or gorse covered headwaters and may have relatively high ecological values.</li> <li>▪ Like Whaingaroa, Aotea Harbour provides abundant and varied intertidal and subtidal habitat for saltwater fish, offering food resources and nurseries, conduits for migratory freshwater fish, and habitat for a multitude of exotic and indigenous waterfowl, marshbirds, and shore birds using the various mudflat, sandflat, saltmarsh and wetland habitats for feeding and breeding.</li> </ul>
<b>Experiential</b> <i>(Moderate to High)</i>	<ul style="list-style-type: none"> <li>▪ The northern Aotea Harbour mouth is highly expressive of the natural dune processes of the west coast. The sequencing of dunes, to saltmarsh to native coastal bush cover provides a strong sense of naturalness.</li> <li>▪ The southern harbour mouth is modified with coastal reclamation, residential subdivision and structures. Human modification is apparent around the settlement of Aotea along with the productive forestry of the coastal margins between Aotea and Kaawhia Harbours.</li> <li>▪ Land use modification occurs most frequently at the southern extent of Aotea Harbour, outside the District boundary. Some areas with headlands and native bush cover are expressive of the natural processes and patterns. Parts of the coastal terrestrial area provide high levels of perceived naturalness whilst other areas are low to moderate. Low to moderate perceived naturalness is attributed to areas of pasture, human settlement and infrastructure including roading.</li> </ul>

Aotea Specific Characteristics at Level 4	
<b>Oioroa</b>	
<b>Rating</b>	Very High
<b>Key Values</b>	The largest sand dune headland of its type on the west coast it is highly reflective of the coastal processes. The extensive sand dunes extend from open coast to inner harbour. Vegetation sequencing is a good example of coastal dune, shrub to estuarine species. The area is extremely remote with no public access possible. The coastal experience is dominated by the coastal processes including continued dune movement.
<b>Additional Comments</b>	
<ul style="list-style-type: none"> <li>Modification is extremely limited with historical Maaori use of the land.</li> </ul>	
<b>Tauranga Bush, Te Pahi Point, Pirau Bush</b>	
<b>Rating</b>	Very High
<b>Key Values</b>	Successional native bush vegetation dominating large headland and inner harbour margins with sequencing beyond the coastal environment line. The coastal margins include coastal wetland systems (Te Pahi Point) which reflect the natural processes occurring within them. The areas are remote with little evidence of human presence or modification within them.
<b>Additional Comments</b>	
<ul style="list-style-type: none"> <li>Modification is apparent on the margins of the bush areas where they interface with agricultural land use.</li> </ul>	

## Outstanding Natural Character

Margins of Aotea Harbour Outstanding Natural Character Attributes (Level 4)	
<b>CTA and rating (Level 3)</b>	Aotea Harbour Margins (Very High).
<b>CMA and rating (Level 3)</b>	Aotea Harbour (Very High) - Waikato Regional Council
<b>Values</b>	
Abiotic	<ul style="list-style-type: none"> <li>▪ Dramatic and highly dynamic large active dune system at the harbour mouth. Considered a geopreservation site the abiotic processes are an excellent example of the unmodified coastal processes of the west coast.</li> </ul>
	<ul style="list-style-type: none"> <li>▪ The shallow harbour and its intertidal zone remain largely unmodified except for the margins of the residential settlement. The fluvial processes remain largely unmodified excluding some culverts at the southern edges of the harbour where vehicle access is provided for. The remainder of the harbour retains the natural estuarine and wetland features which contribute to the movement of water into and out of the harbour.</li> </ul>
Biotic	<ul style="list-style-type: none"> <li>▪ Some 930ha of regenerating forest and indigenous scrubland borders the harbour, with seven ecological sites registered by Waikato Regional Council.</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Oioroa sand dunes provides an excellent example of native vegetation sequencing from dune to coastal shrubland to estuarine vegetation. This is a key ecological site.</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Rauiri Head dune scrubland is also a registered ecological site.</li> </ul>
Experiential	<ul style="list-style-type: none"> <li>▪ Large areas of the harbour margin are heavily vegetated with native bush cover transitioning to estuarine vegetation and wetlands upstream. The natural patterns and their connectedness highlight the natural landform and microclimate present in each area of the harbour.</li> </ul>
	<ul style="list-style-type: none"> <li>▪ High perceived naturalness values due to limited modification</li> </ul>
	<ul style="list-style-type: none"> <li>▪ High experiential values associated with the interpretation of the dominant abiotic and biotic processes occurring within the harbour and on its margins. The experience of the 'entire dune process' from coast to inner harbour is memorable and recognised as completely natural and unmodified.</li> </ul>
	<ul style="list-style-type: none"> <li>▪ The lack of access and inturn remoteness is apparent in the mid to northern parts of the area.</li> </ul>
	<ul style="list-style-type: none"> <li>▪ The lack of human modification within the identified area is a significant part of the experience of the naturalness of the area.</li> </ul>
<b>Mapped extent</b>	
The mapped extent of this Outstanding Natural Character Area is defined by the following: <ul style="list-style-type: none"> <li>▪ Terrestrially, this covers Potahi Point dunes including large areas of native bush cover and excludes smaller pockets of narrow native bush along the harbour margin.</li> </ul>	
Margins of Aotea Harbour Rating	Outstanding