

# Northland Regional Landscape Assessment Worksheet

	Unit name – <b>MANGAWHAI BARRIER SPIT</b>
DESCRIPTION AND CHARACTERISATION	
Component	Comment
<b>Land Types</b> <small>(refer to list overleaf)</small>  Sandspit.	<p>The spit is a highly visible and powerful landform. Although its size is not readily apparent when viewed from across the estuary, seen from elevated locations, or from on the spit itself, its scale – both in terms of its length, and height of dunes – is impressive and unexpected. The patterns of drifting sand, wet areas and vegetation, in conjunction with the colour of the river are particularly attractive on sunny days.</p>
<b>Geology</b> <small>(including geopreservation sites)</small>	<p>The New Zealand Geopreservation Inventory identifies the spit as being of regional significance and classifies it as an extremely well defined landform of scientific/educational value.</p> <p>The unit comprises Holocene coastal dunefield and beach sands with Late Quaternary alluvium located at low elevations around the estuary and in the stream valleys. The sands form active dunes around the ocean beach and fixed dunes and terraces further inland (i.e. Mangawhai Heads). The Pleistocene terrace deposits are poorly consolidated silty sands, muds and gravels with minor vegetative remains (plant fragments and peat). A hard iron pan often caps these deposits (Massey 1987). Further inland the geology is characterised by Early Miocene calcareous sandstone and siltstone (partly alternating with graded sandstone), pumiceous and andesitic tuff, and limestone.</p>
<b>Soil Types</b>	<p>The unit is almost entirely overlain by shifting or recently consolidated sand, with the exception of a small area of Red Hill sandy loam on the western edge of the unit.</p>
<b>Ecology</b> <small>(including protected vegetation / features, PNAP Level 1 and 2 sites)</small>	<p>The draft Rodney Ecological District PNAP report identifies this unit as ROD014. The site comprises an area of 914.9 ha (2.2 ha forest, 28 ha wetland, 19.5 ha shrubland, 270.3 dunefield/sandfield, 597.6 ha estuarine. Only a portion of this area is contained within the unit.</p> <p>The report states that the Mangawhai Sandspit largely comprises extensive areas of open sandfield with the two most common dune plant species being pingao and spinifex. The report notes the former is dominant throughout the entire site.</p> <p>The threatened sand tussock <i>Poa billardierei</i> is locally common on steep exposed foredunes, occurring with occasional pingao and sedgeland dominated by abundant <i>Carex pumila</i> occurs in shallow water, with occasional <i>Juncus articulatus</i>. The damp margins of these areas are characterised by herbaceous species such as <i>Lobelia anceps</i>, <i>Limosella lineata</i>, <i>Microtis unifolia</i>, and <i>Pseudonaphalium luteoalbum</i>. The native grass <i>Lachnagrostis billardierei</i> is also present.</p> <p>Another large dune slack further to the north contains co-dominant wiwi and oiwi, with <i>Carex pumila</i> and <i>Lobelia anceps</i> occurring commonly in the understorey. Sea aster is frequent throughout the duneslack, while <i>Lachnagrostis billardierei</i> is occasional on the drier margins. Pampas and coastal toetoe are present in small quantities.</p> <p>The PNAP report notes that the site comprises a highly significant complex of dunes, estuarine and coastal habitats that is contiguous</p>

	with dunes systems further south at Te Arai and Pakiri (in the Auckland part of Rodney ED). Collectively, the dunes that extend from Pakiri to Mangawhai are the best and least modified on the east coast of the Auckland Ecological Region and the south-eastern part of the Northland Ecological Region.
Archaeological sites	<p>The unit is located on an area of dune land created from approximately 800 years ago. Paleo-environmental evidence suggests that the dunes formed following a fire through the coastal forest which existed on a low hill within the property before 800 years ago. The fire initiated a period of instability.</p> <p>A number of deflated middens (refuse heaps) are located at the southern end of the unit. Radiocarbon dates obtained from these middens date human occupation from circa 400 years ago.</p> <p>Archaeological evidence demonstrates successive occupation of sites over time.</p>
Heritage Landscapes	<p>The unit and the Te Arai Point area have European historical associations extending back 150 years. European settlement began at Te Arai on the southern end of the spit in 1859, and the area was farmed until the creation of the Mangawhai State Forest in the 1960s.</p> <p>The spit and its immediate environs were associated with gum digging from the 1870s until the 1920s.</p> <p>A historic shipwreck, the Rose Blanche, is located adjacent to the coastline.</p>
<p><b>Landscape characterisation</b> (including the identification of any specific characteristics)</p> <p>This unit comprises a 4km long spit of sand dunes, ocean beach and estuarine shore which separates the Mangawhai Harbour from the open sea. The unit ranges from some 200m in width at its narrowest, to over 1km wide at its base.</p> <p>Despite being highly visible from land based locations within Mangawhai Heads and the surrounding area, the scale of the feature is only apparent when seen from elevated locations such as Wintle Street, or from on the spit itself. From these locations, the simplicity of the landform, its scale and the whiteness of its constituent sand are particularly striking. In addition, gentle curve and the cumulative scale of the contextual beach, is particularly apparent when looking towards Te Arai to the south.</p> <p>The spit is a feature that is much valued by the community, as is evidenced by the ongoing interest and community involvement focused through the Mangawhai Harbour Restoration Society.</p> <p>The feature displays high ecological values and is a noted nesting site for the Fairy Tern as well as other species such as NZ and Banded Dotterels, Caspian and White Fronted Terns, and Variable Oyster Catchers.</p> <p>Whilst predominantly natural and unmodified, small areas of exotic tree species, such as acacia and pines detract to a small degree from its naturalness.</p> <p>The New Zealand Geopreservation Inventory identifies the spit as being of regional significance and classifies it as an extremely well defined landform of scientific/educational value.</p> <p>On the western flank of the spit, near its base, small dune ponds are flanked by native species and the stands of acacia.</p>	

<b>EVALUATION</b>		
<b>Criteria</b>	<b>Rank</b>	<b>Comment</b>
<b>Natural Science Factors</b>		
<b>Representativeness</b> Natural landscapes are clearly characteristic of the area, district or region. The key components of the landscape will be present in a way that defines the character of the place and distills its character and essence. Endemic associations.		The spit is highly representative of the northland coast and others occur further north along the coast. As well as forming a powerful visual element, the spit defines and provides shelter for the settlement.  The presence of native coastal flora species, and fauna such as the Fairy Tern lend the unit significant endemic associations.
<b>Rarity</b> Natural features are unique or rare in the region or nationally, and few comparable examples exist.	<b>5</b>	A number of similar spits occur around the Northland coast, however the unit is of particular significance due to the limited built, landform and vegetative modification.
<b>Aesthetic Values</b>		
<b>Coherence</b> The patterns of land cover and land use are largely in harmony with the underlying natural pattern of the landform of the area and there are no significant discordant elements of land cover or land use.	<b>4</b>	The unit has a powerful relationship with the ocean and estuary and displays a strongly natural character with minimal disturbance. Vegetation patterns reflect landform and hydrological patterns.  The unit displays a high level of landscape structure and patterning due to its simplicity and minimal levels of modification. The vegetation patterns strongly reflect the topographical and landform structure, contributing to the high levels of natural character.
<b>Diversity &amp; Complexity</b> The elements contributing to overall landscape character are diverse and complex (particularly in ecological terms) without creating disharmony.	<b>5</b>	The ecological patterns of the unit are complex, diverse and robust.
<b>Vividness</b> Natural features and landscape are widely recognised across the community and beyond the local area and remain clearly in the memory; striking landscapes are symbolic of an area due to their recognisable and memorable qualities.	<b>5</b>	The scale and height of the dunes, when seen in juxtaposition with the flatness of the river, estuarine area and sea, lends the feature a strength and presence when viewed from proximate locations, and from more distant elevated locations.  The spit appears as a strongly natural, striking and dynamic feature which displays a high level of interaction with the sea – being a consequence of coastal processes. The form of the spit and associated beach emphasizes the gentle curve of the coast, most evident when viewed from elevated locations. From elevated locations the power of the sea is evidenced by the waves and by the haze of salt spray that often drifts over the spit.  The water colour is affected by the atmospheric conditions and weather, however on sunny days the sea and the interplay of the surf with the beach is particularly striking.
<b>Naturalness</b> How affected by human activity is the landscape? Does human activity intrude on the landscape? Eg. <ul style="list-style-type: none"> <li>• Presence of buildings and associated built development.</li> <li>• Presence of infrastructure services.</li> <li>• Extent of indigenous forest</li> </ul>	<b>4</b>	No buildings are located within the unit, however dwellings and associated buildings within the Tern Point subdivision flank the unit on its south western edge. The majority of these buildings are integrated within or are screened by the dense stands of acacia, which has developed since the subdivision was undertaken. One dwelling, located atop a local high point is particularly visible from within the unit. No evidence of infrastructure services is visible within the

<p>cover.</p> <ul style="list-style-type: none"> <li>• Homogeneity of exotic vegetation.</li> <li>• Presence / extent of modified agricultural land use.</li> <li>• Strength of natural processes / ecological patterns.</li> <li>• Unmodified and legible physical relief and landform.</li> <li>• Presence of water.</li> </ul>		<p>unit.</p> <p>There is a strong presence of indigenous sand dune species. The presence, and homogeneity of these species associations contributes to the naturalness and high levels of natural character of the feature. Ongoing revegetation planting by the community is assisting with the establishment of native species on disturbed areas.</p> <p>Whilst the spit underwent modification during the 1990s during attempts to restore the integrity of the spit following erosion caused by Cyclone Bola, there is limited evidence of that modification today.</p>
<p><b>Intactness</b></p> <p>Natural systems are intact and aesthetically coherent and do not display significant visual signs of human modification, intervention or manipulation, visually intact and highly aesthetic natural landscapes.</p>	4	<p>There is little visible evidence of human modification, although modification of the spit has been undertaken in the past when a channel was cut from the ocean through to the estuary.</p> <p>The unit retains a high degree of naturalness and intactness.</p>
<p><b>Experiential Values</b></p>		
<p><b>Expressiveness</b></p> <p>The 'legibility' of the landscape. Natural features clearly demonstrate the natural processes that formed them.</p>	5	<p>The feature clearly displays evidence of coastal erosive and depositional processes.</p>
<p><b>Sensory qualities</b></p> <p>(These are landscape phenomena as directly perceived and experienced by humans, such as the view of a scenic landscape, or the distinctive smell and sound of the foreshore).</p>	5	<p>The proximity of the sea, and lack of shelter on the spit enables the observer to experience views and the smell of the ocean, as well as the sound of the surf. Shelter from wind is provided by dunes, and within dune hollows, the power of the wind and sound of the surf is stilled.</p>
<p><b>Transient Values</b></p> <p>The consistent and repeated occurrence of transient features that contributes to the character, qualities and values of the landscape; landscapes are widely recognised for their transient features and the contribution that these make to the landscape.</p>	4	<p>The presence of native dune plant species and native fauna lend the feature a distinct endemic character. In addition, the coast displays a unique NZ character. Cycles of roosting / nesting of native fauna, as well as migratory cycles provide a transient element to the endemic character.</p> <p>In addition, seasonal changes also contribute to the transient values of the unit.</p>
<p><b>Remoteness / Wildness</b></p> <p>Does the landscape display a wilderness character, remote from and untouched by human presence? Eg.</p> <ul style="list-style-type: none"> <li>• Sense of remoteness</li> <li>• Accessibility</li> <li>• Distance from built development</li> </ul>	3	<p>Whilst relatively close to settlement, the sense of remoteness when visiting the spit, particularly when traversing portions which do not gain views of the Mangawhai Heads settlement, is particularly strong. This experience can be heightened by weather conditions – such as on the beach during stormy or windy conditions – but is dependent on the numbers of visitors to the spit.</p> <p>Since subdivision of Tern Point, access is easier, but generally limited to owners of properties and their visitors. Access is available by boat, or along the beach from Te Arai, to the south.</p> <p>Built development is relatively close, being within Tern Point to the south west.</p>

<p><b>Shared and recognised values</b></p> <p>Natural features and landscape are widely known and valued by the immediate and wider community for their contribution to a sense of place leading to a strong community association with, or high public esteem for the place.</p>	<p><b>5</b></p>	<p>The spit is highly valued by the local community as is evidenced by the support for the Mangawhai Harbour Restoration Society who undertaken revegetation and restoration plantings within the unit.</p>
<p><b>Spiritual, cultural and historical associations</b></p> <p>Natural features and landscapes can be clearly and widely known and influenced by their connection to the spiritual, cultural and historical valued in the place and includes associative meanings and associative activities valued by the community. These can include both activities and meanings associative meanings are spiritual, cultural or social associations with particular landscape elements, features, or areas, whilst associative activities are patterns of social activity that occur in particular parts of a landscape, for example, popular walking routes or fishing spots.</p>	<p><b>5</b></p>	<p>Consultation was initiated during the mapping process, but has not led to any feedback within the required period.</p> <p>The spit is highly valued from a cultural and ecological perspective.</p>

Rank scale between 1 (low) and 5 (high)

<b>Land Types</b>
Coastal cliffs / escarpment
Low escarpment
Bays and headlands
Beach
Dune complex
Reefs and islands
Estuarine / inlet
Open harbour
Coastal plain
Rolling hills
Steep hills; moderate to high relief
Ranges; high relief
Strongly rolling land
Low rolling land
Valley floors and flats
Plains
Volcanic cones
River mouth
Wetland
Watercourses
Lakes and water bodies

Photograph of unit



View of Mangawhai spit with Bream Tail in the background