

# Northland Regional Landscape Assessment Worksheet

	Unit name – <b>RUSSELL FOREST AND BUSH REMNANTS</b>
DESCRIPTION AND CHARACTERISATION	
Component	Comment
<b>Land Types</b> Northern and eastern dissected ranges; high relief land type	Forming a powerful backdrop to the coast, this land type extends from the Waikare Inlet west to Ruapekapeka and south to Helena Bay with individual peaks rising to some 960 metres.
<b>Geology</b> (including geopreservation sites)	Extensive forest and shrubland on steep dissected hillcountry of Waipapa Terrane greywacke and chert, with some Kerikeri Volcanics basalt flow remnants and associated boulder colluvium.
<b>Soil Types</b>	<p>Although the unit encompasses a large area, the soil cover is relatively uniform, with the main type comprising Te Ranga steepland soils, light brown clay loam, clay loam and stony clay loam.</p> <p>On the western side of the unit, and extending up to the Waikare inlet, and on the eastern fringes of the unit Marua light brown clay loam predominates.</p> <p>Isolated pockets of Waiotu friable clay loam are present in the northern portion of the unit, and incursions of Whakapara silt loam and clay loam are present within stream valley bottoms.</p>
<b>Ecology</b> (including protected vegetation / features, PNAP Level 1 and 2 sites)	<p>This Level 1 site is identified as 05/003 in the Whangaruru Ecological District PNAP report comprises a large and complex mosaic of unmodified, cutover, and secondary forest types, as well as shrublands and freshwater wetlands, extending through an altitudinal range from sea level to 430 m asl. In places, full sequential gradients exist, from mature hill forest through to coastal riparian and marshy tones, to extensive mangrove forests within the Bay of Islands (covered by Q05/001). There are many associated canopy species, including 11 species of gymnosperm.</p> <p>Other forest types and local dominance are likely, which were not identified by the reconnaissance survey.</p> <p>The Russell Forest, and its contiguous areas of private and Crown-owned forest, constitutes one of the largest contiguous forest blocks in the Eastern Northland Ecological Region, the other being the more inland Puketi/Omahuta tract in the Puketi Ecological District. It is underlain by the region's oldest geological structure—Permian–Jurassic greywacke—and features some 50 km of coastal riparian margin. The forests, shrublands, and wetlands in the vicinity of Waikare Inlet, and between Ngaiotonga and Taupo Bay, are of particular importance in maintaining this altitudinal gradient and extensive riparian verge.</p> <p>The forest provides a significant linkage function, linking the Bay of Islands Estuary and Cape Brett to the numerous forest remnants to the east and south. The area contains a significant number of threatened animal and plant species. These include king fern (Serious Decline), raukawa (Gradual Decline), willow-leaved maire (Gradual Decline), <i>Thelypteris confluens</i> (Gradual Decline), <i>Calystegia marginata</i> (Sparse), kawaka (Sparse), monoao (Sparse), and <i>Pittosporum p. pimelioides</i> (Sparse). Regionally significant plants include hutu, <i>Asplenium hookerianum</i>, <i>Blechnum fluviatile</i>, <i>Doodia aspera</i>, <i>Hymenophyllum lyalli</i>, <i>Ileostylus micranthus</i>, <i>Pratia angulata</i>,</p>

	<p><i>Loxsoma cunninghamii</i>, <i>Luzula picta</i>, <i>Metrosideros carminea</i>, <i>Schizaea bifida</i>, <i>Sticherus flabellatus</i>, gully tree fern, horopito, mountain harakeke, tawari, tawaroa, and toatoa.</p> <p>Fauna values within such a large forest tract are predictably very high, there being a generally accepted correlation between habitat size and the number of species which are found within it. This may also be due in part to the great range of altitudes, topography, and physical situations found within the forest.</p> <p>Notable species include recent past records of NI weka (Nationally Endangered), visiting NI kaka (Nationally Endangered), NI brown kiwi (Serious Decline), and kukupa (Gradual Decline), pateke (Nationally Endangered), NI tomtit (Regionally Significant), redcrowned kakariki (Regionally Significant), NZ falcon (Nationally Vulnerable) have also been made within the forest, auckland green gecko (Gradual Decline) and the forest gecko (Regionally Significant), Northland green gecko (Gradual Decline).</p> <p>Threatened snails include <i>Schizoglossa worthyae</i> (Serious Decline), kauri snail (Gradual Decline), Punctidae sp. 28 (Range Restricted), Punctidae sp. 147 (Range Restricted) from the Ngaioitonga area, and the flax snail <i>Placostylus hongii</i> (Range Restricted) on the Orokawa Peninsula, and <i>Phenacohelix brooki</i> (Range Restricted). Other threatened invertebrates include the forest ringlet butterfly (Serious Decline) and the stag beetle <i>Paralissotes mangonuiensis</i> (Sparse).</p> <p>Native fish species known from this forest include longfin eel (Gradual Decline), lamprey (Sparse), giant bully (Regionally Significant), bluegill bully (Regionally Significant), banded kokopu (Regionally Significant), redfin bully, shortfin eel, common bully, common smelt, inanga, and torrent fish. Native freshwater limpets, freshwater shrimp, and koura are also present.</p>
Archaeological sites	None known.
Heritage Landscapes	None known.
<p><b>Landscape characterisation</b> (including the identification of any specific characteristics)</p> <p>The Russell Forest encompasses an extensive and little accessed area covering an area of some 22,737 ha (which includes 18,154 ha of forest, 4484 ha of shrubland, and 100 ha of wetland).</p> <p>Contiguous with forested areas on Cape Brett and to the south west, the unit also extends to the ocean coast south of Taupiri Bay, and to the sheltered estuarine coastal edges on the Waikare Inlet. These northern edges are frequently contiguous with adjoining units which provide additional links to the coast including Dicks Bay, Te Rawhiti Inlet and Cape Brett.</p> <p>To the south it links with a succession of forested hills – identified as the North east bush clad hills unit and the Eastern bush clad hills unit – forming a discontinuous link through to the Whangarei Harbour.</p> <p>The majority of the unit falls into two large catchments – flowing west to the Waikare Inlet, or east to the Whangaruru Harbour and ocean. A number of smaller catchments on the southern edge of the unit feed systems that flow to the south west, south and south east, including one that flows into the Hikurangi swamp and the Wairua River.</p>	

The landform within the unit rises to a maximum height of 430 m with a complex and dissected terrain over much of its area with little modification with the body of the forest. Development has occurred on the forest margins, and in places this has extended up valleys, particularly where roads provide access. Here, on the valley bottoms and gentle slopes pasture has been established, although regenerating vegetation evidences previous clearance of vegetation which has since been left to regenerate naturally.

The forest forms an important and powerful backdrop to the east coast, particularly where the steep and elevated landform is closer to the coastal edge around Whangaruru. Along the Waikare Inlet it the forested margins are less dramatic in character, but enhance the sense of naturalness and remoteness.

Inland, the presence of the forest and the rugged terrain contributes to the remote character of the landscape.

Access across the unit is facilitated via the Russell Forest Walkway, part of the Te Araroa Walkway.

## EVALUATION

Criteria	Rank	Comment
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### Natural Science Factors

<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 landscape is strongly representative of the sequence of ranges vegetated with native forest that occurs on the east coast of the Whangarei District. These features characterise the landscape within this part of the region, and are representative of Northland as a whole.
<b>Rarity</b> Natural features are unique or rare in the region or nationally, and few comparable examples exist.	5	Whilst a number of examples of this land type exist, the strength lies partly in the repeated occurrence within the region. They are characteristic of Northland and rare in a national sense.

### Aesthetic Values

<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.	4	The main body of the forest displays a high level of coherence, with the forest clearly reflecting and emphasizing the underlying landform. The vegetation within north east part of the ranges is more fragmented, however the natural patterns still display a level of coherence where vegetation has been retained on steeper valley sides and within gullies.
<b>Diversity &amp; Complexity</b> The elements contributing to overall landscape character are diverse and complex (particularly in ecological terms) without creating disharmony.	5	The forest displays a high level of ecological diversity and complexity, with a variety of vegetation types reflecting the topography, drainage patterns and slope aspect.
<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.	3	Generally the forest is seen from its margins, since few roads traverse the ranges or provide access to its interior. As such, it is the margins of the forest that are experienced as a low backdrop of vegetated and dark hills. Whilst a powerful form, their appearance is not very striking from the majority of viewpoints.  Experienced from within, the forest assumes a more vivid and memorable appearance. The Russell Walkway, a DoC maintained track provides tramping access through the unit.
<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</li> </ul>	4	The majority of the landscape displays a high level of naturalness with minimal evident human activity. Past clearance for agriculture is evidenced by the diversity of the kanuka forest, but the contiguous character of the forest lends the ranges a high level of natural character when viewed from the southern quadrants.

<ul style="list-style-type: none"> <li>• services.</li> <li>• Extent of indigenous forest cover.</li> <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>Fragmentation of the vegetation to the margins of the forest tends to diminish the apparent naturalness</p> <p>Vegetation types and patterns are clearly representative of topography, drainage patterns and slope aspect, and this suggests a high level of strength of natural processes.</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>	<b>4</b>	The main body of the unit displays a high level of intactness.
<b>Experiential Values</b>		
<p><b>Expressiveness</b></p> <p>The 'legibility' of the landscape. Natural features clearly demonstrate the natural processes that formed them.</p>	<b>4</b>	The landscape displays a high level of legibility in terms of the hydrological processes that have shaped the valleys and ridges. The complexity and spatial arrangement of vegetation reflects the underlying topographical form of the hills.
<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>	<b>4</b>	The presence and strength of the landscape is most immediate and apparent when experienced from within the unit. From here the vertical and horizontal scale of the feature is apparent, and the landform, and vegetation cover provides a strong sense of enclosure.
<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>	<b>3</b>	Strongly influenced by light and weather conditions, although light conditions on the southern side tend to be more muted in scope. Ridges create extremely distinctive silhouettes during dawn and dusk. Seasonal influences of flowering trees and other plants.
<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>	<b>3</b>	The paucity of development within, and on the inland edges of the unit provide a measure of remoteness and wildness. On the east coast however, settlement sandwiched between the hills and the coast diminish the remote experience.
<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>	<b>5</b>	The Russell Forest is a valued resource within the local rather than the wider community.
<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>		Consultation was initiated during the mapping process, but has not led to any feedback within the required period.

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

Land Types
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

Photographs of unit



View east over Russell Forest to Whangaruru Harbour



View south over Russell Forest towards Huruiki



View north west over Russell Forest from east coast near Ngaiotonga