

# Northland Regional Landscape Assessment Worksheet

Unit / Landscape Ref No.	Unit name – Brynderwyn Range and bush margins
DESCRIPTION AND CHARACTERISATION	
Component	Comment
<b>Land Types</b>  Northern and eastern dissected ranges; high relief land type	Visible as an elevated vegetated landform, the unit forms a highly recognizable feature within the landscape. The Ranges form a perceptual gateway to the mid-north region with a dominant 'spine' ridge which extends as an unbroken line from Bream Tail in the east, to Bald Rock in the west.
<b>Geology</b> (including geopreservation sites)	Hillslopes and gullies are predominantly underlain by Mesozoic greywacke (Waipapa Terrane), with: <ul style="list-style-type: none"> <li>• An area of Holocene alluvium at the base of a fault scarp at Q08/375683.</li> <li>• Holocene valley floor alluvium present in the eastern headwater of the Waihoihoi River.</li> <li>• Outlying Miocene sandstone and mudstone (Waitemata Group) in the north west of the landscape.</li> <li>• Miocene sandstone and mudstone (Waitemata Group) present in the vicinity of Q07 450727.</li> <li>• Miocene sandstone and mudstone (Waitemata Group) in the vicinity of Q07 453733.</li> <li>• Miocene sandy mudstone (Waitemata Group) in the northernmost part of the extreme eastern end.</li> </ul> <p>The draft Rodney PNAP report (2012) describes the geology of the Brynderwyn Ranges thus:</p> <p><i>"The southern side of the Brynderwyn Range is a steep scarp face of a greywacke fault block that is tilted to the north, a fault running along the base of the scarp. This is the southern-most extent of greywacke in the Northland Region. Waitemata Banded Sandstones underlies much of the undulating to gently rolling land that extends to Dome Valley. Mangawhai Heads, Cattlemount, Pukekaroro and the steeper and higher hills running through to Maungaturoto are Parahaki (dacite) volcanics. These are rhyolite (almost totally silica, very little iron or aluminium) volcanics and at the opposite end of the scale to the iron and aluminium-rich basalts. Tara, west of Mangawhai, is a stray basalt volcanic dome.</i></p> <p><i>This is also the southern (remaining) extent of the Northland Allochthon with calcareous mudstones and soft limestones which are gently rolling to undulating. Ash showers from central North Island rhyolite volcanoes have washed off the hills and concentrated in or around the edges of basins. This silica-rich alluvium podzolises more rapidly than alluvium from other sources, creating the gumfields of the Mangawhai area. Sand drifts along the coast and alluvium carried by rivers have dammed off valleys leading to the formation of peat basins.</i></p> <p><i>The sand deposits range in age from recent drifts of dune sand through to strongly podzolised old dunes and estuarine deposits. Hollows within the dunes have also filled with peat"</i></p>
<b>Soil Types</b>	The predominant soil type within the unit is Pukekaroro steepland soils, clay loams whilst Te Ranga steepland soils, light brown clay loam and stony clay loam is present on the north side of the ridge. Scattered pockets of Piroa clay are evident, whilst the Ranges are bisected by an area of Marua clay loam at the eastern end.
<b>Ecology</b> (including protected vegetation / features,	The forest associated with the Brynderwyn Hills comprises a mosaic of

<p>PNAP Level 1 and 2 sites)</p>	<p>exotic and native species and covers an area of some 8,300 ha, of which approximately 5,600 ha is in Waipu ED and 2,700 ha is in Rodney ED (around Cattlemount and out to Pukearenga).</p> <p>Identified in the Waipu Ecological District PNAP report as Q08/225 (Brynderwyn Hills Forest Complex), and within the Rodney Ecological District as ROD003 (Pukepohatu, Cattlemount and Surrounds), both Level 1 sites. The area associated with the Waipu Ecological District totals 3,278.1 ha of indigenous forest and shrubland, linked by approximately 2,300 ha radiata pine plantations and pasture. The area contained within the ROD003 unit is 2,138.9.</p> <p>The PNAP notes that the existing plantation forest plays an important role in this area by providing connectivity between indigenous forest remnants.</p> <p>In terms of forest and shrubland diversity, the Brynderwyn complex is the most ecologically diverse in the Waipu Ecological District, with 60 different ecological units recorded, of which 38 are considered representative of their types. The ten parts of the site are currently linked together by plantation forest, which plays an important role in this area by providing wildlife habitat and connectivity between indigenous forest remnants (e.g. for Hochstetter's frog, tomtit, invertebrates). Ten threatened fauna species (grey duck, North Island kaka, North Island long-tailed bat, bush falcon, Auckland green gecko, the land snail <i>Amborhytida dunni</i>, long-tailed cuckoo, longfin eel, kukupa, and Hochstetter's frog) and five regionally significant fauna species (banded kokopu, giant bully, tomtit, bellbird, and red-crowned kakariki) have been recorded in this site. The Brynderwyn Hills are considered to be the northern stronghold for Hochstetter's frog. Three threatened plant species (mida, kawaka, and <i>Anzbas rotundifolius</i>) and 11 regionally significant plant species (<i>Brachyglottis kirkii</i> var. <i>angustior</i>, carmine rata, <i>Coprosma parviflora</i>, <i>Grammitis cilata</i>, gully tree fern, <i>Hebe macrocarpa</i> var. <i>macrocarpa</i>, northern rata, <i>Pelargonium inodorum</i>, <i>Pratia angulata</i>, <i>Schizaea bifida</i>, and tree fuchsia) have been recorded in this site.</p> <p>This site described in the Waipu Ecological District PNAP report is contiguous with a large area of indigenous forest and radiata pine plantations to the south, within the Rodney Ecological District (c.2,700 ha). Approximately 22.2% (726.0 ha) of the site has some form of legal protection.</p>
<p>Archaeological sites</p>	<p>There is a history of occupation and use of the ranges and numerous archaeological sites are present within the unit.</p>
<p>Heritage Landscapes</p>	<p>Evidence of early European settlement, farming and forestry practices are evident within the unit.</p>
<p><b>Landscape characterisation</b> (including the identification of any specific characteristics)</p> <p>The Brynderwyn Range forms the southern portion of a 'horseshoe' of elevated land, largely vegetated with native forest that curves inland from Bream Tail on the eastern coast up to the Takahiwai Range on the southern side of Whangarei Harbour. This reflects the underlying Waipapa Terrane geology.</p> <p>The ranges extend for some 20 km across the region in an east – west direction, the succession of high points along its ridge rising to a height of some 300 – 400 m.</p>	

The ranges display a greater sense of impact and drama when viewed from the south rather than the north. The south facing slope of the eastern half of the ranges drops quickly from the ridge to the surrounding rural context and this juxtaposition between steep forested slopes and mildly undulating pastoral land is striking. In contrast, the foothills on the northern side of the main ridge extend for some distance and only gradually diminish in elevation – the gradual transition from elevated hills to the low-lying rural landscape diminishes the vividness of the feature. Furthermore, the foothills on the northern side of the main ridge are vegetated with a mosaic of plantation forestry and native forest – this modification detracting from the appearance of naturalness and coherence.

Whilst the ranges are generally aligned in an east-west direction, they extend to the south at the mid-western end, to include the highest point – Cattlemount, at 430 m. The ‘projection’ of elevated land also includes the dacite domes of Pukepohatu (Bald Rock), south of Cattlemount, and Pukeareinga to the west. Pukekaroro lies slightly separated to the south. This localized cluster of volcanic features, identified as separate outstanding landscapes, contribute to the vividness and drama associated with the ranges on their southern side.

The extent and coverage of vegetation differs considerably on the north facing Whangarei District side of the range when compared with the south facing Kaipara District side. Within the Whangarei District, the significant native vegetation is primarily confined to the north eastern flowing catchments. Cullen Road defines the catchment boundary between the north eastern flowing and north western flowing catchments. At the southern end, the native forest extends to the skyline ridge. Further to the north, the upper catchments of the north eastern flowing watercourses are more modified, with a reduced diversity of species and with a greater presence of pine plantation. Whilst the pine plantation is excluded from the unit, the majority of the modified native vegetation is included being visually and spatially contiguous with the dominant elevated landform which forms a backdrop to views from the coast and CMA to the east.

The ranges also form a perceptual barrier between the Kaipara and Whangarei Districts and are regarded as an ‘iconic’ landform, most visible where State Highway 1 snakes between the elevated landform before ascending and descending the ranges. The ranges are also visible from an extensive catchment both to the north and south, forming a backdrop to views.

The ranges rise sharply from the surrounding rolling landform and the contrast in topography and vegetation serves to accentuate and increase the prominence and influence of the landscape.

The ranges display varied levels of modification along their length, with pockets at the western and eastern ends that display a high levels of naturalness, particularly where accessibility is difficult. The central portion of the ranges are more modified with extensive areas of plantation forestry and pasture. At the western end of the ranges, the combined presence of the elevated range, Bald Rock, Pukekaroro and Pukearenga, further to the west dominate the State Highway and strongly influence the character of the road corridor. Similarly, at the eastern end, the ranges form a forested and dramatic gateway for the Cove Road route north to Langs Beach and Waipu Cove.

Where development has occurred on the elevated land within the ranges it is sometimes very visible due to the use of inappropriate colouring and materials.

## EVALUATION

Criteria	Rank	Comment
<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.	<b>5</b>	Viewed from the southern side the landscape presents a strongly natural feature with largely contiguous vegetation which dominates the rural landscape to the south. The landscape forms a sequence with adjoining elevated and vegetated features such as Pukearenga, Bald Rock and Pukekaroro such that, whilst the features strongly contrast with the surrounding rural landscape, they form a powerful cluster of features that characterize the area. The steep

		slopes, vegetated with diverse native vegetation, lacking in significant visible modification reflect the characteristic native forest that exist further north within the mid and far north of Northland
<b>Rarity</b> Natural features are unique or rare in the region or nationally, and few comparable examples exist.	4	The ranges, and the cluster of nearby outstanding landscapes relate strongly to each other to form a landscape of considerable drama and presence. The ranges, in particular form a dominant feature which is visible from a wide catchment both to the north and south and, although comparable to other ranges, such as Mareretu, are considered to be of significance in a regional sense.
<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.	5	<p>The southern side of the main ridge, and the portion of the ranges that extends to the south, including Cattlemount do display a high level of coherence, with a relatively contiguous cover of native forest. Much of this forest is diverse and established and the vegetation patterns reflect the underlying topography. In places clearance of vegetation has occurred on ridge tops to provide grazing, but generally this does not diminish the values associated with the landscape.</p> <p>Subdivision and development within the forest on the southern facing slopes has been limited to date. The Marunui development is an example that has enabled the successful integration of development into the landscape. Examples of built development elsewhere are more prominent, but due to their limited number these do not diminish the overall coherence of the unit.</p> <p>Where the unit extends to the north, within Whangarei District, it displays a high level of coherence which gradually diminishes further to the north as the native vegetation cover becomes more broken, and pine plantations become dominant.</p> <p>At the eastern end of the unit, scattered dwellings are visible, particularly to the west of Mangawhai. In this area pressure from development has resulted in subdivision encroaching on the lower slopes of the range and the margins of the forest, with a resulting erosion of coherence.</p> <p>The northern side of the range differs to some degree with a significantly greater level of modification – primarily in the form of vegetation clearance and plantation forestry resulting in a diminished level of coherence. As a result, only pockets of the ranges at the western end, with a more extensive area at the eastern end where larger areas of contiguous native vegetation remain have been included within the landscape area.</p>
<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 southern side of the range, and pockets of forest on the northern side display a high level of ecological diversity and complexity.
<b>Vividness</b> Natural features and landscape are widely recognized 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.	5	The Brynderwyn Ranges form a valued and widely recognized feature across the community. The ranges act as a waymarker for travelers heading north and are referred to (loosely) as the northern extent of the Auckland region.

		The expansive view afforded from the State Highway at the summit of the range provides travelers with the first glimpse of the Whangarei District, including the Bream Bay coast and the iconic silhouette of Heads.
<p><b>Naturalness</b> How affected by human activity is the landscape? Does human activity intrude on the landscape? Eg.</p> <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 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>	4	<p>Viewed from the south, and from the east on the northern side of the ranges (Cove Road), the landscape displays a high level of naturalness and contrasts with the foreground rural landscape. The vegetation is largely contiguous over the majority of the feature with only limited encroachment from built development or exotic forestry.</p> <p>Some clearance has occurred on the tops of spur and ridges throughout the landscape, although this is more focused at the eastern end of the ranges and whilst visible (due to the contrast between the colour of the grass and vegetation, it only detracts to a limited degree from its naturalness.</p> <p>The vegetation patterns reflect the underlying topography to a high degree and the PNAP report indicates a high level of strength in terms of natural processes.</p>
<p><b>Intactness</b> 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>The landscape displays a high level of intactness over an extensive area. The southern side of the ranges, including Cattlemount, and the eastern portion of the northern side displays limited modification that is visually intact. A limited number of scattered dwellings and cut tracks are visible on the north western facing slopes.</p> <p>The most visible portion of this landscape, being Pilbrow Hill displays a diversity and intactness despite being bisected by the State Highway where it crosses the ranges.</p>
<b>Experiential Values</b>		
<p><b>Expressiveness</b> The 'legibility' of the landscape. Natural features clearly demonstrate the natural processes that formed them.</p>	4	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 ranges.
<p><b>Sensory qualities</b> (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 ranges form a dominant and ever present skyline backdrop to the wider landscape to the south, as well as to the east. For individuals living in close proximity to the ranges they form an island of fauna that influences activity in the surrounding area.</p> <p>Views from the top of the ranges – either from the roads that cross, climb to provide access to residential development, or from the Brynderwyn Walkway are extensive and dramatic. They provide views of iconic features such as Whangarei heads and the Mangawhai sandspit.</p>
<p><b>Transient Values</b> 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>	3	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 rata and pohutukawa bloom.

<p><b>Remoteness / Wildness</b> 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>	Individuals can gain a sense of remoteness and isolation when on the ranges, however views to the surrounding rural landscape diminish the sense of wildness
<p><b>Shared and recognised values</b> 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 ranges form an iconic feature that is recognized across the community as a landmark feature.
<p><b>Spiritual, cultural and historical associations</b> 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>	<b>4</b>	<p>Consultation was initiated during the mapping process, but has not led to any feedback within the required period.</p> <p>The Ranges are a recognizable and highly visible feature and are valued by the community as a backdrop to settlement and the landscape to the north and south.</p>

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

### Photographs of unit



**Brynderwyn Range**



**Brynderwyn Range**



**Brynderwyn Range, Pilbrow Hill**