Northland Regional Landscape Assessment Worksheet

	Unit name **– BREAM HEAD / MANAIA SEQUENCE**

DESCRIPTION AND CHARACTERISATION

Component	Comment
Land Types Volcanic cones land type Northern and eastern dissected ranges; high relief land type .	Part of a powerful sequence that runs from the Manaia Ridge out through Bream Head to Hen and Chicken Islands, with a recurrent landform and repeated patterns of skyline formations. Strong relationship with adjacent CMA, typically as a defining mass to adjacent coastal areas (particularly in relation to the seaward face of Bream Head.
Geology (including geopreservation sites) Manaia / Bream Head stratovolcano	Miocene volcanic breccia. Andesite ridges and flows. The Manaia Ecological District PNAP report notes the following: *"Manaia Ridge, Mt Aubrey, Castle Rock, the hill above Home Point, and much of the Matariki (Mt Lion)-Te Whara (Bream Head) ridge consist of intercalated volcaniclastic breccia and lava flows cut by dikes. These rock sequences originally formed parts of the flanks of large andesitic stratovolcanoes that have since been mostly eroded away. Andesitic dikes and laccoliths at Kauri Mountain, Reserve Point, Darch Point, Motukaroro, High Island, Home Point, Peach Cove, and the south end of Ocean Beach, and microdiorite laccloliths at Bream Islands and east of Smugglers Bay, are subvolcanic intrusions that formed within and at the bases of these volcanoes. The eroded remnants of smaller dacitic volcanoes form hills on the eastern side of Munro Bay, north of Timperley Road, between McKenzie Bay and Ocean Beach, at Busby Head, and on the spur west of Mt Lion. Many of the volcanic hills in Manaia ED are prone to slope failures. The lower flanks of Mt Aubrey, Manaia Ridge, and the Matariki (Mt Lion)-Te Whara (Bream Head) ridge in particular are fringed by landslide and rock fall deposits."*
Soil Types	The predominant soil type within the unit is Huia steepland soils, stony silt loam. Pockets of Bream clay loam are present on the coast and on the north facing slopes whilst on the low lying northern slopes Omu clay loam is evident. Maungarei clay is present on Busby Head.
Ecology (including protected vegetation / features, PNAP Level 1 and 2 sites)	The unit is defined by a discrete ecological district. It is known for its high habitat values and unique combinations of plant communities that include several threatened species. Kauri / podocarp, kanuka mixed broadleaf with pohutukawa, herbfield and low shrubland. Imperatives of Bream Head Restoration Trust apply to key parts of unit. Widespread action of Whangarei Heads Landcare Forum members. The Manaia Ecological District PNAP report described the current vegetation thus: "*Manaia ED has a relatively large proportion of indigenous forest and shrubland remaining compared with what remains in other ecological districts in Northland. This can partly be attributed to its precipitous topography, which discouraged clearance and protected some vegetation from fire.* *Coastal forest near the shoreline, including forest and treeland on cliffs and scarps, is dominated by pohutukawa. Coastal forest on*

	hillslopes contains many different forest types; common canopy species include pohutukawa, puriri, taraire, kowhai, karaka, kanuka, and mamaku. *Secondary forest in Manaia ED is dominated by kanuka/manuka. Mixed stands of manuka and kanuka dominate shrubland areas. Areas of manuka□dominant shrubland are rare in Manaia ED. Gumland vegetation typically occurs on more impoverished soils. Lowgrowing manuka is abundant in association with species such as Gleichenia microphylla, Dracophyllum spp., Baumea teretifolia, Schoenus tendo, Epacris pauciflora, Drosera auriculata, and a range of orchid species.* The PNAP report identifies a number of threatened and at risk plant species: *Manaia ED has a high number of nationally threatened and uncommon plant species for its size (6,444 ha). Six 'Threatened' and 27 'At Risk' plant taxa (de Lange et al. 2009) have been recorded. Three are classed as Nationally Critical, one Nationally Endangered, two Nationally Vulnerable, five Declining, 19 Naturally Uncommon, and three Relict (Table 2).* *There is one plant species endemic to Manaia ED: Pseudowintera insperata (Nationally Critical) recorded from Manaia Ridge Scenic Reserve and Surrounds (Q07/069) and Bream Head Scenic Reserve and Surrounds (Q07/074)."* With respect to threatened and at risk fauna species, the PNAP report comments: "*Manaia ED has 24 nationally 'Threatened' and 25 'At Risk' fauna species, including one unconfirmed record of long-tailed bat (Chalinolobus tuberculatus)…… Manaia ED has records of ten nationally 'Threatened' bird species (one Nationally Critical, one* *Nationally Endangered, eight Nationally Vulnerable) and 17 'At Risk bird species (six Declining, five Naturally Uncommon, two Recovering, and four Relict) in Miskelly et al. (2008)."*
Archaeological sites	Abundance of recorded sites throughout these areas. (Nevin reporting).
Heritage Landscapes	As above. Well recorded and documented Nova Scotian history. Strong relationship with waterborne transport in early times. Waterside sites of past industry including Reotahi freezing works and Taurikura lime quarry closely allied to this landscape unit. The Manaia Ecological District PNAP report contains the following commentary: "*The first European settlement of the Whangarei Heads area began in the 1830s. The Manaia Block, which stretched from Munro Bay to Taurikura and across to Ocean Beach, was purchased by the Crown for £200 in 1855. The area was soon settled by Scots from Nova Scotia, followers of the non-conformist Rev. Norman McLeod. Local historic notables, including the MacGregors, McKenzies, Urquharts and Harrisons, all owned parts of Taurikura Ridge at different times. The area was soon part of a thriving Whangarei Harbour/Head*

	community of settlers with a school and regular church services by the late 1850s (DOC internal report.). Manaia ED was an important link in coastal communications during the development of Northland. Many residents gained their living from the sea; lime was extracted close to the water's edge, and a freezing works plant was built to take advantage of the deep-water anchorage (McManaway 1983). *There was little Maori settlement in the area when the Scots arrived, however, the very large number of archaeological sites is indicative of intensive occupation since the time of early Polynesian settlement, at least 700 years ago (Ritchie 2008)*."

Landscape characterisation

(including the identification of any specific characteristics)

A highly distinctive and 'iconic' landscape sequence that defines the outer harbour and links out across the CMA toward Great Barrier Island. A gateway scene to entering mid Northland when passing over the Brynderwyn ridge. An anchoring element in a sequence of "ecological islands" with similar coastal indigenous forest associations that progress up the eastern coastline to the Bay of Islands and bridging into the mainland from local offshore islands. Collectively provide critical part of the Whangarei Heads area's social identity, providing an enframing/backdrop landform to each bay neighbourhood and a repeating theme that structures the experience of travelling through the broader Heads landscape.

Characteristic features are a very steep landform, rocky pinnacles (and headlands in some instances), high consistency of forest/shrubland cover (but with diversity in its composition) and close association with nearby harbour and open coast seascapes

Part of the distinction and definition of the component parts of this OLA results from the fact that each is typically isolated from the next within a fringe of agricultural grassland in more gentle foothills, further highlighting the rugged terrain and forest cover of the outstanding areas.

Whilst the majority of the identified unit encompasses contiguous areas of forest, scrub or shrubland vegetation, where linking or adjoining landform under pasture is clearly a part of the dominant elevated landscape element, these areas have also been included. Thus, the majority of the Bream Head sequence is within the unit, including;

- pastured areas at the western and eastern ends;
- the forested ridge face of the Mt Lion Range, including the narrow areas of pasture between the forest and ridge crest;
- pastured areas linking Mt Aubrey with the harbour, and;
- areas of pasture on elevated land contained within the wider forest on the eastern face of the Manaia range.

The unit is closely related to Hen and Chickens Island group (which is identified as a discrete OLA) in terms of landform, ecology, and sequence.

EVALUATION

Criteria	Rank	Comment
Natural Science Factors		
Representativeness 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.	**5**	Heads sequence a signature of the Whangarei district and Northland region. Relates to view from Brynderwyn. Commonly found in photographs and other images that seek to convey an impression of Whangarei and Northland
Rarity		High level of rarity at New Zealand level – very distinctive to

Natural features are unique or rare in the region or nationally, and few comparable examples exist.	**5**	this local area in terms of visual identity, geology and ecology.
Aesthetic Values		
Coherence 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**	Strongly unified by rugged landform and contiguity of vegetation cover. Repetition of those key themes, and relationship with adjacent maritime area serves to bring an overarching coherence to the respective discrete areas, despite these being physically separated by lower land and pastoral cover.
Diversity & Complexity The elements contributing to overall landscape character are diverse and complex (particularly in ecological terms) without creating disharmony.	**5**	Detailed and distinctive skyline. Convoluted site slopes with multitude of minor catchments. Diverse ecology.
Vividness 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.	**5**	A bold signature and strong part of Northland's identity. Extremely distinctive and memorable. Commonly referred to at many levels by those living in the Heads area.
Naturalness How affected by human activity is the landscape? Does human activity intrude on the landscape? Eg. • Presence of buildings and associated built development. • Presence of infrastructure services. • Extent of indigenous forest cover. • Homogeneity of exotic vegetation. • Presence / extent of modified agricultural land use. • Strength of natural processes / ecological patterns. • Unmodified and legible physical relief and landform. • Presence of water.	**4**	Very high levels of naturalness within unit, but influenced by proximity of settlements, farming and port complex. Proximity in turn allows for weed invasion and abutting uses that diminish naturalness Indigenous forest cover is largely consistent over the unit, but there are some localized exceptions where elements of pasture are found in elevated locations such as the northern end of the Manaia range, where paddocks have been created near the ridgeline on localized areas that are less severe in their terrain. Closely related to marine waterbody. Small and complex drainage patterns on hill faces, largely ephemeral. Evidence of dramatic drainage and scouring during intense rainfall indicates ongoing formative processes, even in areas where landcover is predominantly natural.
Intactness 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.	**4**	Good level of intactness within unit, although much of the vegetation cover is relatively young. Influence of natural cover along ridges on visual identity
Experiential Values		
Expressiveness The 'legibility' of the landscape. Natural features clearly demonstrate the natural processes that formed them.	**5**	Volcanic origins clearly conveyed by both landform and eroded skyline detail.
Sensory qualities (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).	**5**	Powerful views of unit entering Whangarei District and along harbour and Heads.
Transient Values 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.	**4**	Strongly influenced by light conditions. Ridges create extremely distinctive silhouettes during dawn and dusk. Seasonal influences of rata and pohutukawa bloom.

Remoteness / Wildness Does the landscape display a wilderness character, remote from and untouched by human presence? Eg. • Sense of remoteness • Accessibility • Distance from built development	**3**	Proximity of settlements diminished, but strongly experienced to south of Bream Head and within forest.
Shared and recognised values 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.	**5**	Landforms definitive in Heads community and physically shape and define where settlement has occurred.
Spiritual, cultural and historical associations 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.	**5**	Consultation was initiated during the mapping process, but has not led to any feedback within the required period. Well recorded and widely known Maori mythology applying to Manaia particularly. This is summarized on a public sign at Manaia's foot. Broad body of historical knowledge relating to early European and Nova Scotian settlement and use of Heads area.

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 to Bream Head from north

View to unit from north

View to Mt Lion from north