Northland Region	al Landscape Assessment Worksheet		
	Jnit name – PUKENUI FOREST		
DESCRIPTION AND CHAP			
Component Land Types Volcanic plateau: moderate to high relief land type.	Comment The unit forms an island of elevated and vegetated land which influences the character of the landform when viewed from the north – on Three Mile Bush Road, or from the south – on State Highway 14.		
Geology (including geopreservation sites)	Dissected fault block of Torlesse Terrane greywacke and argillite.		
Soil Types	The unit comprises mainly Marua clay loam with small pockets of Whareora clay loam on the northern fringes.		
	The unit includes a soil site of regional importance, containing a moderate range of little modified soil / vegetation associations. It also contains good examples of Kara soils which are uncommon because most have been developed for dairying (Arand et al. 1993).		
Ecology (including protected vegetation / features, PNAP Level 1 and 2 sites)	Pukenui Forest is identified within the Whangarei Ecological Distric PNAP report as Q07/022. This Level 1 site comprises 1955 ha of forest, 50 ha of shrubland, 3 ha of wetland. The PNAP report also includes the 25 ha Whau Valley dam.		
	The site comprises a large area of forest containing a high diversity of vegetation types including some unmodified areas. The forest is the largest area of forest in the Whangarei Ecological District and is one of the two sites in the Ecological District where king fern has been recorded. It contains significant plant species such as hard beech, kawaka, <i>Metrosideros carminea</i> and the fern <i>Loxsoma cunnunghamii</i> . Significant fauna includes NI brown kiwi, NI kaka, kukupa, kakariki, NI tomtit, tui, morepork, shining cukoo, fantail, silvereye, grey warbler, Australisian shoveler, NZ scaup, grey duck, mallard, paradise duck, little shag, Long tailed bat and banded kokupu.		
	The site is of significance due to its size and the high diversity of vegetation types, supporting several threatened species. The site has 32 different vegetation types, the second highest diversity in the Ecological District. There are large areas of mature, unmodified forest and the logged areas are showing vigorous regeneration with a high density of podocarps. It is the largest remaining area of forest left in the Whangarei Ecological District.		
	The site is habitat for several threatened and regional significant bird, bat, fish and plant species. It forms the forested catchment of the headwaters of the Mangere River, one of the last remaining examples of riverine old growth forest habitat in this Ecological District.		
Archaeological sites	None known.		
Heritage Landscapes	None known.		

Landscape characterisation

(including the identification of any specific characteristics)

Pukenui and the neighbouring forested Western Hills form a containing feature for Whangarei City on its western side. Although less utilized by residents and vistors, the forest is threaded with a network of walking tracks that provide links between Three Mile Bush Road to the north, the city to the east, and Maunu to the south.

The hills have a complex and dissected character and are divided into three separate catchment – the Mangere Stream to the west, Waiarohia Stream to the north east and east, and the Te Hihi Stream to the south.

The unit encompasses an extensive area, which is not readily apparent on the ground. Views of the unit are only easily available from the encircling roading network. From the road, and from neighbouring residential areas, Pukenui appears as a backdrop of dark vegetated hills. Development has occurred on the margins where the unit adjoins the city, along Whau Valley for example.

More recently, the creation of rural residential lots has begun to take place on the southern side, with developments such as Golf Harbour Drive gaining access into the hills on the margin of the forest from State Highway 14. In places the southern margins of the forest have become blurred, where plantation forestry has been undertaken.

Part of the forest is used as a water catchment for the water supply for the city. What Valley dam, located at the eastern end of the unit is used as a recreational resource and provides a glimpse of the forested interior of the unit.

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.	4	The Pukenui Forest forms one of the sequence of forested hills that characterises the Northland landscape. Along with Te Wai-iti and Parihaka it provides a strong and natural to the Whangarei urban centre.	
Rarity Natural features are unique or rare in the region or nationally, and few comparable examples exist.	4	The landscape forms one of a number of forested hills that display little modification from built development. They contribute to and characterize the landscape. Along with the other forested hills, they relate strongly to each other to form a landscape of considerable drama and presence.	
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.	5	The landscape displays a high level of coherence. It reflects the form and pattern of the underlying topography with a largely contiguous vegetation cover of some 2000 ha in area.	
Diversity & Complexity 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 diversity and complexity whilst visually maintaining coherence and harmony.	
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	The landscape is limited from the locations from which it can be seen, these mainly being distant views from the encircling roads. similar vegetated features and therefore appears less dramatic over a wider area. Within the visual catchment of the Otaika Valley however the landscape dominates the area and is a memorable feature that characterises the 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	The landscape possesses a high level of naturalness with little evident built development or infrastructure services. The contiguous forest cover contrasts with the rural character of the surrounding landscape and this heightens the perception of its naturalness. The PNAP report indicates that natural processes and ecological patterns are strong and in good health.
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	The Otaika Valley bush forms a large area of forest with a high diversity of vegetation types. The contiguous vegetation, although modified in the past for logging, displays a high level of intactness with aesthetically coherent vegetation patterns.
Experiential Values		
Expressiveness The 'legibility' of the landscape. Natural features clearly demonstrate the natural processes that formed them.	5	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.
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).	3	Primarily limited to the smells and sounds of the forest, with occasional views to the wider landscape from high points within the forest.
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.	3	Strongly influenced by light and weather conditions. Seasonal influences of the blooming of trees and shrubs.

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	The proximity of the landscape to settlement and the ease of access diminishes the wildness and remote experience. Some sense of remoteness can be gained within the forest however.
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.	3	The proximity of the landscape to the urban centre and settled areas ensures a moderate degree of recognition., although the area most proximate to the City are the Western Hills. The forest does have some community association as a backdrop to views from roads such as State Highway 14 and Three Mile Bush Road.
Spiritual, cultural and historical associations Natural features and landscapes can be clearly and		Consultation was initiated during the mapping process, but has not led to any feedback within the required period.

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.	
routes or norming apoils.	

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

Land Types				
Coastal cliffs / escarpment				
ow 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



Pukenui Forest from Three Mile Bush Road



Pukenui Forest from Whau Valley dam