	Unit name – NORTH HEAD DUNE LAKES		
DESCRIPTION AND CH	ARACTERISATION		
Component	Comment		
Land Types (refer to list overleaf)	Cluster of dune lakes within an extensive sand dune complex.		
Geology (including geopreservation sites)	The lakes are described as lake and swamp deposits in depression on mid-late Pleistocene (Karioitahi Group) consolidated parabolic dunefield, ponded at landward edge of Holocene parabolic dunefield.		
	The Northland Geopreservation Inventory identifies the Pouto sand dunes as being an excellent, unmodified example of the North Kaipara Head active dunelands system. It classifies the feature as a moderately well defined landform of scientific/educational and scenic value.		
Soil Types	The unit is entirely overlain by drifting and recently stabilized sands.		
Ecology (including protected vegetation / features, PNAP Level 1 and 2 sites)	Identified in the Kaipara Ecological District PNAP report as P09/001 (Western coast: Pouto dune system), this Level 1 site is 5798 ha in area. It comprises a range of vegetation types including sandfield, kanuka shrubland and forest, freshwater wetland and reedland, pohuehue vineland.		
	The Pouto dune system is identified as being of extremely high national and international importance, representing the best remaining example of a large, relatively unmodified sand dune system. It supports an impressive range of threatened plant and animal species, including a nationally and regionally important populations of northern New Zealand dotterel and significant populations of grey duck.		
	The PNAP report notes the following significant flora. The Pouto dune system is the Northland stronghold of marsh fern (Gradual Decline) (including AK 252344) and sand spikesedge (Gradual Decline) (including 2003, AK 284635). Pingao, recorded during this survey, also in Gradual Decline. Gunnera dentata (Cameron et al. 2001), G. prorepens (2000, AK 248035), Myriophyllum votschii (including AK 252641), Glossostigma elatinoides (Lake Mokeno: Wells et al. 2007). Ladies' tresses (2001, AK 252671), Psilotum nudum (1996, AK 228957), rohutu (1987, AK 180267), Hebe diosmifolia (1987, AK 180253), thick-leaved coprosma, and sand coprosma, both recorded during this survey, are all Regionally Significant.		
	A number of significant fauna species have also been identified within the site. These include: Northern dunes P09 015 467: Northern New Zealand dotterel (Nationally Vulnerable), Caspian tern (Nationally Vulnerable), banded dotterel (Gradual Decline), variable oystercatcher (Regionally Significant), Australasian bittern (Nationally Endangered), grey duck (Nationally Endangered) and Wrybill.		
Archaeological sites	Not known.		

Landscape characterisation

(including the identification of any specific characteristics)

This unit is located near the apex of North Head and some 2.5km from Pouto. It comprises a number of waterbodies that includes Lake Humuhumu, Rotootuauru, Rotokawau, Waingata, Kanono and Kahuparere.

Although a number of the lakes read as individual features, separated by areas of pasture, in total they form a sequence that extends inland from the coast near the Pouto settlement inland for over a distance of some 9-10 km. With a pastoral and modified context, this unit differs markedly from the west coast lakes unit.

The lakes are accommodated within a pastured landscape although the landform reflects its duneland origins. Pine shelterbelts provide a framework within which a number of the lakes are set – Lake Rotokawau being encircled by a shelterbelt.

Most of the lakes are unfenced and are accessible to stock. Similarly, the majority contain limited levels of marginal vegetation, although Lake Humuhumu is contiguous with an area of wetland and scrubland on its western side, as is Lake Lake Kahuparere with a small area of wetland on its southern side. This wetland links with an extensive area of coastal shrubland vegetation which extends to Kaipara Head to the west. Vegetation types associated with the lakes include Kanuka forest, Raupo reedland and Manuka-Baumea arthrophylla raupo-Carex secta shrub reed-sedgeland.

Several of the smaller lakes have become infilled overtime and retain little open water.

The western edge of the unit is defined and buffered by the pine plantations associated with North Head.

EVALUATION.					
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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	A sequence of dunefields and dune lakes is found on the west coast of the North Island, in conjunction with the larger harbours – Manukau, and Hokianga. The unit is therefore highly representative of the landscape typologies of the west coast and displays a highly endemic character.			
Rarity Natural features are unique or rare in the region or nationally, and few comparable examples exist.	5	The number and scale of lakes present on North Head is unusual in a national sense and is thus considered to be rare and of significance.			
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	The pattern of relic dune formations and the lakes, are clearly in harmony. The sequence of lakes sits comfortably within the dune landform and draws the eye through the landscape along that sequence.			
		Extensive pine plantations have been established on more stabilized areas on the Pouto peninsula, and these form the western edge of the unit.			
Diversity & Complexity The elements contributing to overall landscape character are diverse and complex (particularly in ecological terms) without creating disharmony.	2	The unit shows a limited degree of diversity and complexity with respect to natural and ecological patterns due to the modified surrounding landscape and impacts from grazing stock.			

Vividnoss		As a group, the sequence of lakes appears striking
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	particularly on a sunny day when the colour of the water against the surrounding pasture is intense and vivid.
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.	2	Although limited built development is visible within the unit, the prevailing landuse has clearly modified and degraded the natural processes and patterns. The unit has been modified to an extent that it displays reduced naturalness in terms of these processes and patterns, but a moderate level of aesthetic naturalness.
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.	2	The pastoral context of the lakes demonstrate human modification.
Experiential Values		
Expressiveness The 'legibility' of the landscape. Natural features clearly demonstrate the natural processes that formed them.	3	The landscape displays a moderate level of dynamism by virtue of the visible sand dune processes. In addition, the lakes reflect landform and hydrological patterns in a coherent way that demonstrates their formative processes.
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	In the lee of the pine trees, the unit is sheltered and separated from the effect of coastal exposure however, views of the lakes on a sunny day are highly scenic.
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	The lakes attract a variety of birds and migratory cycles, roosting and nesting cycles demonstrate transient values.
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 area displays a sense of remoteness and naturalness, although the modified rural character of the area diminishes this perception to some extent.
		The site has limited accessibility and has limited numbers of visitors, although the beach is used as an access north.
		The site is relatively close to Pouto, although the limited distance belies the difficulty of accessibility.
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 isolation of the unit has reduced the awareness of the community to its values however the isolation and wild character of North Head is appreciated by the community.

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.

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 of North Head dune lakes looking north east