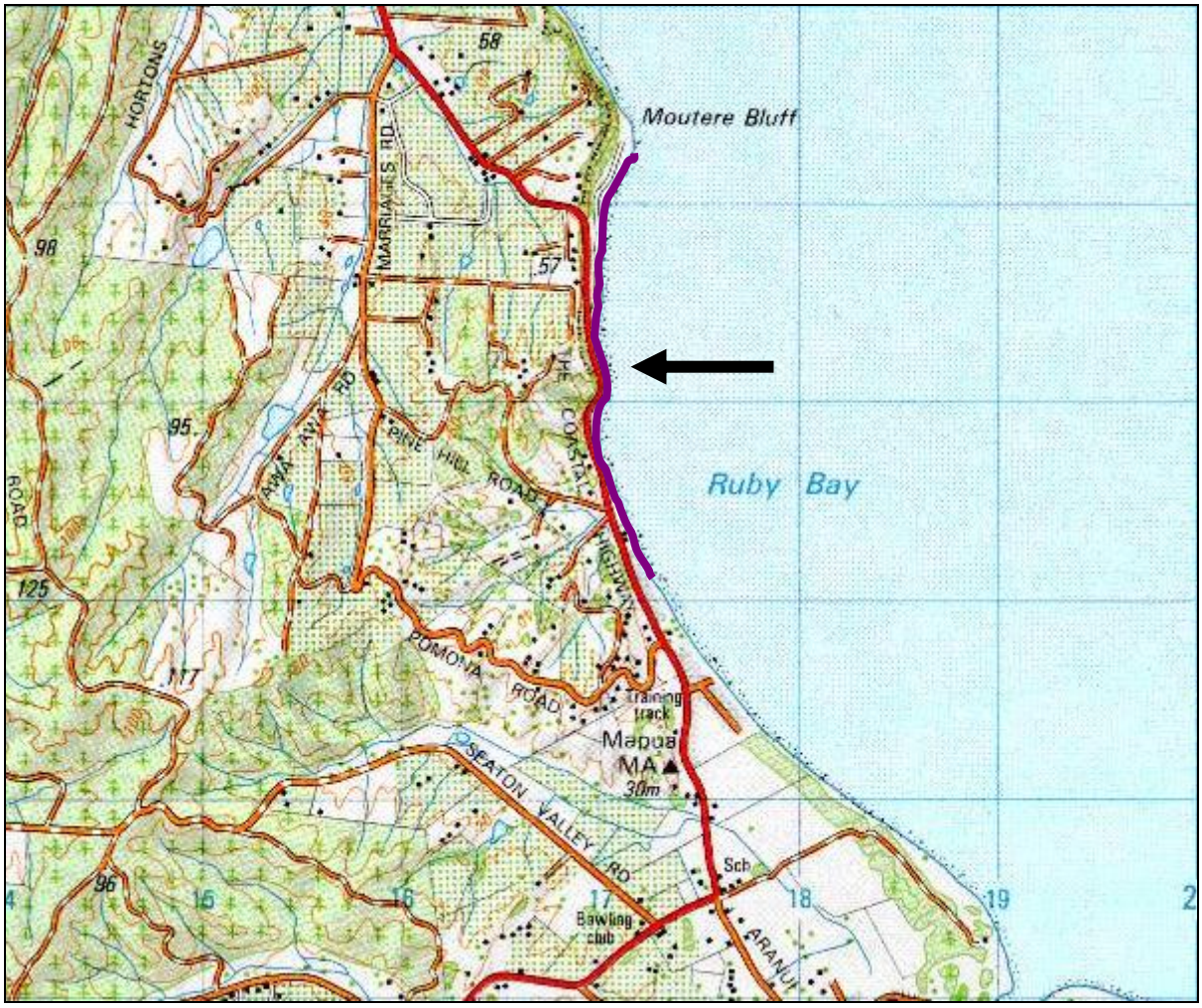
Native Habitats Tasman
Ecological Assessment Report

Site:	MU 392
Landowners/Occupiers:	Common Marine & Coastal Area

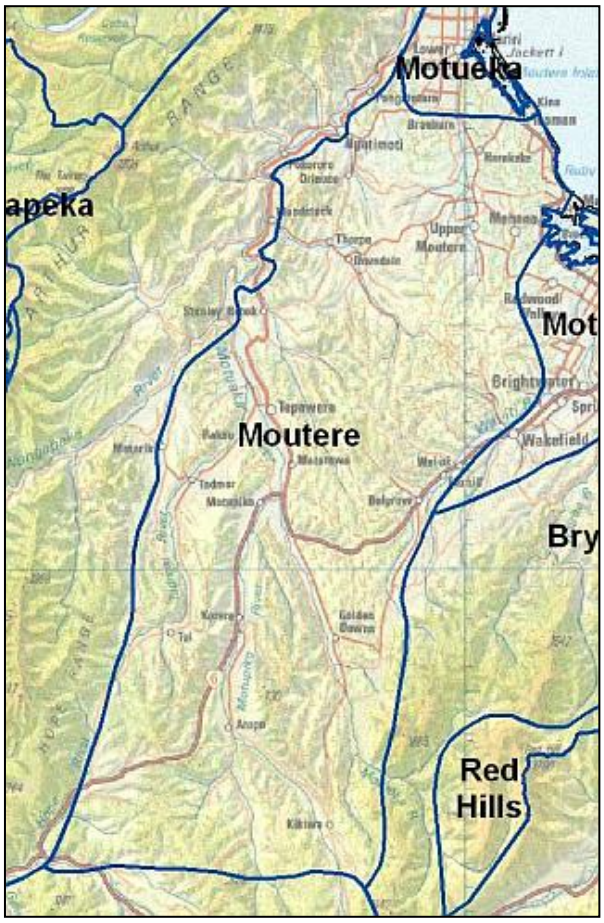
Ecological District:	Moutere
Grid Ref:	E2517022 N5998057
Surveyed By:	Michael North
Date:	22 May 2012
Survey Time:	½ hr



THE SETTING –
MOUTERE ECOLOGICAL DISTRICT (ED)

Location and Physical Description

The Moutere Ecological District occupies most of the Moutere Depression. It is rolling hill country founded on deeply weathered fluvio-glacial outwash gravels (Moutere Gravels), with a little limestone and granite in the west. The hills are drained by numerous valleys with flat alluvial floors. There is a small amount of coast containing an estuarine shore and a series of bluffs. The climate is sunny and sheltered, with very warm summers and mild winters. Most of the land is in private ownership and is used for pastoral farming, forestry, horticulture and small-scale settlement. Tasman District Council has considerable landholdings in this District.



Ecosystem Types Originally Present

Formerly, the Ecological District, apart from the waterways, would have been almost entirely covered in forest. The alluvial valley floors supported towering podocarp forests of totara, matai, rimu, miro and kahikatea. On the hills, black beech was dominant at the seaward end of the District, with hard beech prominent further inland, giving way further inland still to red beech with silver beech. In sheltered coastal gullies were pockets of lush broadleaved forest containing tawa, titoki, pukatea, nikau and tree ferns. Along the coastal bluffs was forest of ngaio, titoki, nikau and other broadleaved trees, with totara and black beech. Fringing the estuary would have been a vegetation sequence like that in the neighbouring Motueka Ecological District. Freshwater

wetlands occurred in the coastal valleys and would have included fertile lowland swamps with kahikatea, harakeke, cabbage tree and tussock sedge (*Carex secta*). Rivers and streams, including riparian ecosystems (trees, shrubs, flaxes, toetoe, etc) and some braided river beds, would have made up an appreciable although not large portion of the District. The table below gives estimates of the extent of these original ecosystems.

Existing Ecosystems

Most of the natural terrestrial ecosystems have been lost. What remains is largely a scattering of fragments of beech forest, with some larger areas in the south. There are tiny remnants of coastal bluff forest, lowland broadleaved forest and podocarp forest only, and a few wee freshwater wetlands. The estuary margin is still surprisingly intact, although its fringing vegetation sequence has largely gone. The table below gives estimates of the proportions of the original ecosystems that remain.

Degree of Protection

There is little protected land within the Ecological District. However, there are significant remnants protected in reserves and covenants. These include a coastal bluff forest remnant at Ruby Bay, tawa forest at Eves Valley, podocarp forest remnants near Upper Moutere, several key remnants of beech forest and larger tracts of beech forest in the south. A few tiny wetlands are also protected. The table below gives estimates of how much of the original and remaining ecosystems have formal protection.

Indigenous Ecosystems – Moutere Ecological District

Ecosystem type	Original extent (% of ED)	Proportion of original extent remaining (%)	Proportion of original extent / remaining area protected (%)	
			Original	Remaining
Coastal sand dune and flat	—	—	—	—
Estuarine wetland	<1	30	?	?
Fertile lowland swamp and pond	1	<5	<2	<20
Infertile peat bog	—	—	—	—
Upland tarn	—	—	—	—
Lake	—	—	—	—
River, stream and riparian	1	40	?	?
Lowland podocarp forest	20	1	<1	50
Lowland broadleaved forest	1	<5	<5	100
Lowland mixed forest	5	<5	<5	50
Lowland beech forest	65	5	2	40
Upland beech forest	5	50	40	80
Subalpine forest	—	—	—	—
Lowland shrubland	<1	<5	<1	<10
Upland/subalpine shrubland	—	—	—	—
Frost flat communities	—	—	—	—
Tussock grassland	—	—	—	—
Alpine herbfield and fellfield	—	—	—	—

SITE DESCRIPTION

Location, Geology, Hydrology

The site comprises a number of locations along the upper shore at and above MHW at Ruby Bay.

Habitat

The site is comprised of beach pebbles.

Fauna

(David Melville pers. comm.)
Until recently 80 or more variable oystercatcher were regularly roosting at high tide, but numbers are closer to 65 or so currently. With an estimated population of 4000 birds this represents over 1.5% of the total population, and is therefore considered a nationally significant roost site (>1%).
This species is ranked nationally as 'at risk, recovering'.
The exact position of the roost varies depending on levels of human (and dog) disturbance, weather conditions, beach profile and possibly changes in food availability at offshore mussel reefs. The areas of main concentration are mapped at the end of the report.

Weed and Animal Pests

N/a

Other Threats

Human disturbance is high and may account for the variety of roost locations along this section of shoreline.

General Condition & Other Comments

N/a

Landscape/Historic Values

N/a

ASSESSMENT OF ECOLOGICAL SIGNIFICANCE

The following criteria are assessed:

Representativeness: *How representative is the site of the original vegetation? How representative is the site of what remains?*

Rarity and Distinctiveness*: Are there rare species or communities? Are there any features that make the site stand out locally, regionally or nationally for reasons not otherwise addressed?*

Diversity and Pattern*: Is there a notable range of species and habitats? To what degree is there complexity in this ie patterns and gradients?*

***Size/shape**: How large and compact is the site?*

***Ecological context**: How well connected is the site to other natural areas, to what extent does the site buffer and is buffered by adjoining areas, and what critical resources to mobile species does it provide?*

***Sustainability**: How well is the site able to sustain itself without intervention?*

Site Significance

The technical assessment of significance is tabled in the Appendix.
This site is significant for the following reasons:
With nationally important numbers of roosting variable oystercatcher, this site is significant.

Management Issues and Suggestions

This site is clearly of considerable value for variable oystercatcher and they continue to use it for roosting despite the high level of disturbance from people and dogs. Signage would be of great benefit to inform people of the vulnerability of this species to disturbance. This stretch of beach is of such high amenity value to the community that there is probably little else that can be done to mitigate disturbance.

The central roost site is located around this point – looking to it northward (above) and southward (below) but infact can be located along 2km of shoreline north and south of here depending on disturbance and other factors

APPENDIX
Technical Assessment of Site Significance

Each site is ranked according to the highest ranking vegetation community or habitat that occurs within it. However, a site will be divided into more than one area for assessment purposes if they vary markedly in character, size or condition. Some examples are:

(a) a core area of vegetation (say, a podocarp gully remnant) is surrounded by/adjoins a much larger area of markedly different vegetation (say, kanuka scrub);

(b) a core area of vegetation has *markedly* different ecological values to the surrounding/adjacent vegetation;

(c) where artificially abrupt ecological boundaries occur between an area of primary vegetation and a surrounding/adjacent area of secondary vegetation - that is more than just a change in canopy composition.

The above does not apply if such adjoining vegetation forms only a small part of the total site, or if such vegetation forms a critical buffer to the core area.

Where such division of a site into two or more separately assessed areas occurs, such adjoining areas will also be considered in their buffering/connectivity roles to one another.

This site was assessed as one unit as the above considerations did not indicate the need to assess communities separately.

Note that the secondary and additional criteria cannot feasibly be scored as the habitat comprises physical substrate and weeds, and the fauna are highly mobile birds.

Significance Evaluation		
	Score	**Example/Explanation**
Primary Criteria		
Representativeness		
	L	
Rarity and Distinctiveness		
An important breeding, spawning, resting, roosting or foraging site of at least ecological district importance for an indigenous animal species	H	c1.5% of the national population of variable oystercatcher regularly roost at this site
Diversity and Pattern		
	L	
Secondary Criteria		
Ecological Context (highest score)		
Connectivity		
	N/A	
Buffering to		
	N/A	
Provision of critical resources to mobile fauna		
The site provides seasonally important resources for indigenous mobile animal species and these species are present in the locality even though they may not have been observed at the site.	N/A	
Size and Shape		

Significance Evaluation		
	Score	**Example/Explanation**
	N/A	
Other Criterion		
Sustainability (average score)		
Physical and proximal characteristics		
Size, shape, buffering and connectivity provide for a ***** overall degree of ecological resilience.	N/A	Size Shape Buffering Connectivity
Inherent fragility/robustness		
Indigenous communities are neither inherently resilient nor fragile.	N/A	
Threats *(low score = high threat; lowest score taken)*		
Ecological impacts of grazing, surrounding land management, weeds and pests*	N/A	Grazing Surroundings Weeds Pests

* observed pest impacts only

NB where scores are averaged, the score must reach or exceed a particular score for it to apply

Summary of Scores	Criterion	Ecological District Ranking
Primary Criteria	Representativeness Rarity and Distinctiveness Diversity and Pattern	L H L
Secondary Criteria	Ecological Context Size and Shape	
Additional Criteria	Sustainability	

H = High MH = Medium-High M = Medium ML = Medium-Low L = Low

Summation of Scores to Determine Significance

If a site scores at least as highly as the combinations of primary and secondary scores set out below, it is deemed significant for the purposes of this assessment.

Primary Criteria		Secondary Criteria	
Any of the three primary criteria with a score at least as high as listed		Any of the two secondary criteria with a score at least as high as listed	
		Plus	
→	H		—
	MH x 2		—
	MH + M		—
	MH	+	MH
	M x 2	+	H
	M x 2	+	MH x 2
	M	+	H + MH

H = High MH = Medium-High M = Medium

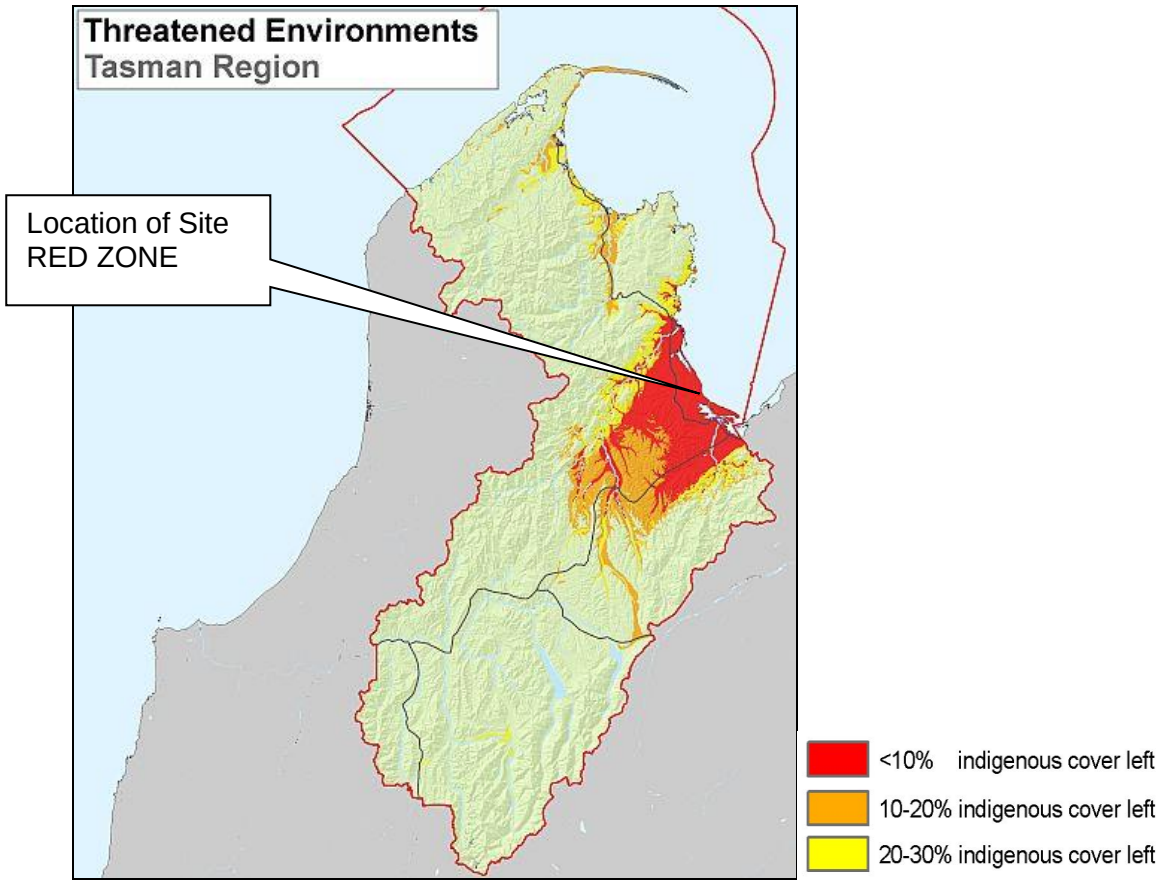
Is this site significant under the TDC assessment criteria? **YES**

Land Environments of New Zealand (LENZ)

LENZ is a national classification system based on combinations of soil characteristics, climate and landform. These three factors combined are correlated to the distribution of native ecosystems and species.

When LENZ is coupled with vegetation cover information it is possible to identify those parts of the country (and those Land Environments) which have lost most of their indigenous cover. These tend to be fertile, flatter areas in coastal and lowland zones as shown in the map below for Tasman District.

Further information on the LENZ framework can be found at-
www.landcareresearch.co.nz/databases/lenz



National Priorities for Protecting Biodiversity on Private Land

Four national priorities for biodiversity protection were set in 2007 by the Ministry for the Environment and Department of Conservation.

National Priorities	*Does this Site Qualify?*
1 Indigenous vegetation associated with land environments (ie LENZ) that have 20 percent or less remaining in indigenous cover. This includes those areas colored in red and orange on the map above.	Yes
2 Indigenous vegetation associated with sand dunes and wetlands; ecosystem types that have become uncommon due to human activity	No
3 Indigenous vegetation associated with 'naturally rare' terrestrial ecosystem types not already covered by priorities 1 and 2 (eg limestone scree, coastal rock stacks)	No
4 Habitats of nationally 'threatened' or 'at risk, declining' indigenous species	No

Further information can be found at -
www.biodiversity.govt.nz/pdfs/protecting-our-places-brochure.pdf

Significance of LENZ and National Priorities

What does it mean if your site falls within the highly depleted LENZ environments, or falls within one or more of the four National Priorities?
These frameworks have been included in this report to put deeper ecological context to the site. They are simply another means of gauging ecological value. This information is useful in assessing the relative value of sites within Tasman District when prioritising funding assistance. They otherwise have no immediate consequence for the landowner unless the area of indigeneous vegetation is intended to be cleared, in which case this information would be part of the bigger picture of value that the consenting authority would have to take into account if a consent was required.

www.topofthesouthmaps.co.nz
Top of the South Maps
MU 392
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0
250
500
750
1,000
Metres
23 July 2022