

## Nowell's Lakes

At a glance (last updated: February 2006)			
TRC reference:	0939-0	Ecological district:	Egmont
Other reference:	STDC SNA 15	LENZ environment:	F5.2c
Land tenure:	Private	Protection status:	A, B, C
GPS:	1. 2620456E – 6175684	Area:	1. 5.7 ha
	2. 2620816E – 6175647N		2. 4.7 ha
		Total:	10.4 ha

### Location

Nowell's Lakes are two lakes located on privately owned land, 3 km south of Hawera. It lies in the Egmont Ecological District.

### General description

Nowell's Lakes and environs have a combined area of 10.4 ha. They are located adjacent to each other in coastal dune land. The lakes have highly modified margins but have been well replanted with flaxland and reedland species. An overland drainage pipe, which controls the lake level at times of flooding, extends from one of the lakes to the coast. The lakes provide an important link between the coast and land for coastal bird life.

### Ecological features

#### Vegetation

The Nowell's Lake site contains reedland and flaxland made up of raupo (*Typha orientalis*), flax (*Phormium tenax*), and lake club rush (*Schoenoplectus tabernaemontanii*). Other native plants present are cabbage trees (*Cordyline australis*), taupata (*Coprosma repens*), and toetoe (*Cortaderia fulvida*).

Exotic plants such as jointed rush (*Juncus articulatus*), sweet grass (*Glyceria maxima*), and pines (*Pinus radiata*) are also present.

#### Fauna

Nowell's Lakes are a feeding area for a significant number of native water birds including the 'Acutely Threatened (Nationally Endangered)' matuku/Australasian bittern (*Botaurus poiciloptilus*) and the 'At Risk (Sparse)' little black shag (*Phalacrocorax sulcirostris*).

Other birds present include the white-faced heron (*Ardea novaehollandiae novaehollandiae*), pied stilt (*Himantopus himantopus*), cattle egret (*Bubulcus ibis coromandus*), paradise shelduck (*Tadorna variegata*), pukeko (*Porphyrio porphyrio melanotus*), and Canadian goose (*Branta canadensis*).

Native freshwater crayfish (*koura*) and freshwater perch (*Perca fluviatilis*) are present in both lakes.

### Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Contains the 'Acutely Threatened' Australasian bittern Also contains the 'At Risk' little black shag
Representativeness	High	Contains indigenous vegetation on F5.2c – an 'Acutely Threatened' LENZ environment
Ecological context	High	Coastal dune wetlands are uncommon in Taranaki. Lakes provide important habitat for coastal birds including migratory birds. Also provides core habitat for Australasian bittern and little black shag, and other indigenous birds
Sustainability	Positive	Recently replanted regenerating vegetation. Key ecological processes still influence the site. Under appropriate management it can remain resilient to existing or potential threats

### Management threats and response

Potential and actual threats to the sustainability of the Nowells Lakes wetland's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Medium to high	Possums, cats, mustelids, hedgehogs, and rats
Weeds	Medium	Jointed rush, sweet grass, gorse and boxthorn
Habitat modification	Low	Fenced

Site protection measures addressing potential threats and actual threats are as follows

Site protection	Yes/No	Description
<b>A</b>	Yes	<b>In part:</b> Taranaki Regional Council Memorandum of Encumbrance (1 of 2 land owners)
<b>B</b>	Yes	Site specific rules apply – Taranaki Regional Council rules for wetlands (refer Appendix IIB of the Regional Fresh Water Plan) – South Taranaki District Council rules for Significant Natural Areas (refer Schedule II of the District Plan) General regional or district rules might also apply
<b>C</b>	Yes	Fenced Enhancement planting of wetland margin Self-help Possum Control Programme



## Nukuhau Lakes Catchment

At a glance (last updated: February 2006)			
<b>TRC reference:</b>	0942-0	<b>Ecological district:</b>	Matemateaonga
<b>Other reference:</b>	STDC SNA 26 SSBI R21/H012	<b>LENZ environment:</b>	F1.1d (9.5 ha) F1.3b (277.8 ha) F7.2a (5.3 ha) F7.1b (2.1 ha)
<b>Land tenure:</b>	Private	<b>Protection status:</b>	B
<b>GPS:</b>	2653000E – 6175600N	<b>Area:</b>	294.7 ha

### Location

The Nukuhau Lakes Catchment is located on privately owned land, 23 km north-east of Patea. It lies in the Matemateaonga Ecological District.

### General description

The Nukuhau Lakes Catchment includes six small lakes within a catchment area of 294.7 ha. The lakes drain into a tributary of the Omahine Stream. The lakes were formed by a large slump and several smaller slips near the gully head, which have impeded drainage. Much of the vegetation surrounding the lakes has been cleared in the past and is secondary regenerating forest and scrub.

The lakes are significant as a rare sequence of slump-formed lakes with associated wetland vegetation, and enclosed within an entirely forested catchment.

### Ecological features

#### Vegetation

The lake edges have a fringe of raupo (*Typha orientalis*), only one or two metres wide. Towards the north-west, toetoe and giant umbrella sedge (*Cyperus ustulatus*) are present, while in the south-west *Carex secta* is common. In the south-west corner a small remnant of swamp forest also persists that consists of pukatea (*Laurelia novae-zelandiae*) and kahikatea (*Dacrycarpus dacrydiodes*).

The wetland vegetation generally merges into secondary vegetation, which is strongly dominated by tree ferns (mainly ponga) and manuka

(*Leptospermum scoparium*). In places, particularly higher up, a number of other species can be found. These include mountain flax (*Phormium cookianum*), koromiko (*Hebe stricta*), karamu (*Coprosma robusta*), hangehange (*Geniostoma rupestre* var. *ligustrifolium*), mapou (*Myrsine australis*), heketara (*Olearia rani* var. *colorata*), and bracken fern. High up in the south-west of the main catchment, ponga and manuka are replaced by mahoe (*Meliccytus ramiflorus*) and there is also rangiora (*Brachyglottis repanda*), lancewood (*Pseudopanax crassifolium*), and mapou present.

The forest on the higher slopes is a mixed broadleaved forest dominated by tawa (*Beilschmiedia tawa*). The canopy also contains hinau (*Elaeocarpus dentatus*) and rewarewa (*Knightia excelsa*), with some Hall's totara.

There is a poorly defined subcanopy with some mahoe, mapou, mamaku (*Cyathea medullaris*), kaikomako (*Pennantia corymbosa*), karamu and pate (*Schefflera digitata*). The understory contains common species such as kawakawa (*Macropiper excelsum*), hangehange (*Geniostoma rupestre* var. *ligustrifolium*), and kamahi (*Weinmannia racemosa*). Climbers include bush lawyer, supplejack (*Ripogonum scandens*), kiekie (*Freycinetia baueriana* subsp. *banksii*), and red rata vine (*Metroideros fulgens*).

On a few ridge and spur crests some black beech (*Nothofagus solandri*), forest persists as well as heketara and mingimingi.

#### Fauna

The Nukuhau Lakes Catchment provide habitat for the 'At Risk (Sparse)'spotless crane (*Porzana tabuensis plumbea*), which is particularly uncommon in Taranaki.

### Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Contains the 'At Risk' spotted crane, which is particularly uncommon in Taranaki
Representativeness	Low	High quality example of indigenous vegetation on F7.2a – an 'At Risk' LENZ environment
Ecological context	High	A rare sequence of slump-formed lakes with associated wetland vegetation within an entire forested catchment. The area is large, well buffered and provides core habitat for the at risk spotless crane
Sustainability	Positive	Though much of the vegetation is secondary there is good scope for continued regeneration. Key ecological processes still influence the site. Under appropriate management, it can remain resilient to existing or potential threats

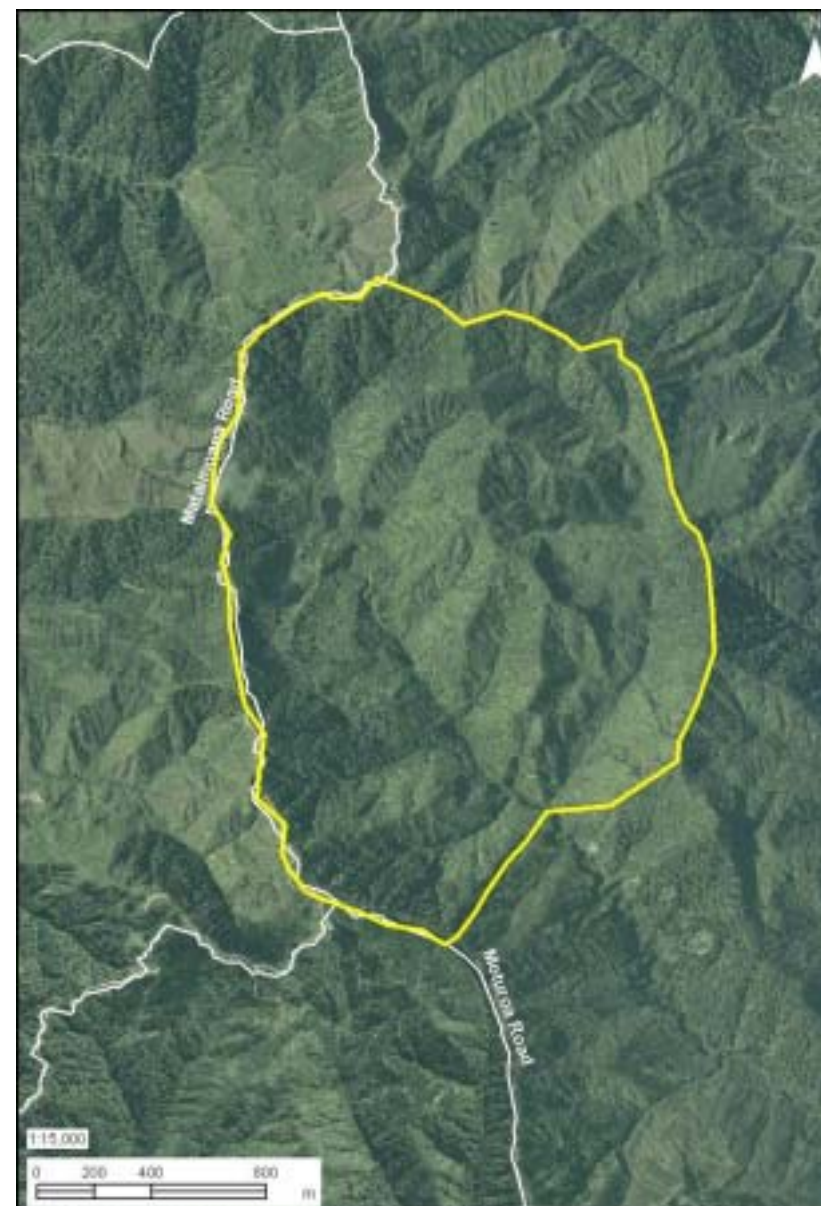
## Management threats and response

Potential and actual threats to the sustainability of the Nukuhau Lakes and Catchment's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Medium to high	Possums, cats, goats, pigs, rabbits, mustelids, hedgehogs, and rats
Weeds	Low	
Habitat modification	Low	Unfenced – grazing is a threat

Site protection measures addressing potential threats and actual threats are as follows:

Site protection	Yes/No	Description
<b>A</b> Public ownership or formal agreement	No	
<b>B</b> Regulatory protection by local government	Yes	Site specific rules apply <ul style="list-style-type: none"> <li>– Taranaki Regional Council rules for wetlands (refer Appendix IIB of the Regional Fresh Water Plan)</li> <li>– South Taranaki District Council rules for Significant Natural Areas (refer Schedule II of the District Plan)</li> </ul> General regional or district rules might also apply
<b>C</b> Active protection	No	



# Oapui Forest Sanctuary

At a glance (last updated: February 2006)			
<b>TRC reference:</b>		<b>Ecological district:</b>	North Taranaki
<b>Other reference:</b>	DOC 70125	<b>LENZ environment:</b>	F5.2a
<b>Land tenure:</b>	Crown	<b>Protection status:</b>	A, B
<b>GPS:</b>	2631613E – 6229251N	<b>Area:</b>	1.2 ha

## Location

The Crown owned Oapuni Forest Sanctuary is located on Junction Road adjoining the Taramouku Stream, 17 km east of Inglewood. The Sanctuary is in the North Taranaki Ecological District.

## General description

The Oapuni Forest Sanctuary, which is administered by the Department of Conservation, is a very small (1.2 ha) remnant of vigorously regenerating secondary lowland podocarp forest on alluvial terraces.

The Sanctuary is in close proximity to other Key Native Ecosystems – Taramoukou and Taramoukou Conservation Area.

## Ecological features

### Vegetation

The Oapuni Forest Sanctuary's mainly canopy species comprises primarily of dense rimu (*Dacrydium cupressinum*) forest.

### Fauna

Unknown. No specific indigenous fauna species have been recorded for the Oapuni Forest Sanctuary.

## Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	Low	Not known to contain any 'Acutely Threatened' species or species uncommon in Taranaki
Representativeness	High	Contains indigenous vegetation on F5.2a – an 'Acutely Threatened' LENZ environment
Ecological context	Medium	Close to and interconnected with other Key Native Ecosystems – Taramoukou Forest and Taramoukou Conservation Area
Sustainability	Positive	A very small remnant so will be influenced by edge effects but with appropriate management should remain resilient to actual and potential threats

## Management threats and response

Potential and actual threats to the sustainability of Oapuni Forest Sanctuary ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Low – medium	Possums, cats, mustelids, and rats
Weeds	Low	
Habitat modification	Low	Very small so any 'edge' effects are prominent

Site protection measures addressing potential threats and actual threats are as follows:

Site protection	Yes/No	Description
<b>A</b> Public ownership or formal agreement	Yes	Forest Sanctuary
<b>B</b> Regulatory protection by local government	Yes	General regional or district rules might apply
<b>C</b> Active protection	No	



## Ohura Road 1 Wetland

At a glance (last updated: February 2006)			
<b>TRC reference:</b>	0953-0	<b>Ecological district:</b>	Matemateaonga
<b>Other reference:</b>		<b>LENZ environment:</b>	H3.1b (4.3 ha) F1.1d (13.1 ha)
<b>Land tenure:</b>	Private	<b>Protection status:</b>	B
<b>GPS:</b>	2648182E – 6216576N	<b>Area:</b>	17.4 ha

### Location

The Ohura Road 1 Wetland is located on privately owned land, 30 km north-east of Stratford. The site lies in the Matemateaonga Ecological District.

### General description

The Ohura Road 1 is a lacustrine wetland and covers 17.4 ha. It is a man-made lake with dam adjacent to pine forestry.

The wetland is in close proximity to the Te Wera Covenant Wetlands and the Te Wera Wetland and is therefore interconnected with these other Key Native Ecosystems.

### Ecological features

#### Vegetation

Raupo (*Typha orientalis*), kahikatea (*Dacrycarpus dacrydioides*), flax (*Phormium tenax*), and lake clubrush/kuta (*Schoenoplectus validus*) are present.

#### Fauna

Birdlife present at the Ohura Road 1 includes spotless crane (*Porzana tabuensis plumbea*) and fernbird (*Bowdleria punctata vealeae*) which are identified as 'At Risk (Sparse)'. Spotless crane and fernbird are both particularly uncommon in Taranaki.

Pukeko (*Porphyrio porphyrio*) are also present.

### Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Contains the 'At Risk' spotted crane and fernbird, which are particularly uncommon in Taranaki
Representativeness	High	Contains indigenous vegetation on H3.1b – an 'Acutely Threatened' LENZ environment
Ecological context	High	The area provides core habitat for the regionally uncommon and threatened spotless crane and fernbird. It is also near and therefore interconnected with Te Wera Covenant Wetlands and the Te Wera Wetland
Sustainability	Positive	A large area in relatively good vegetative condition. Key ecological processes still influence the site. Under appropriate management, it can remain resilient to existing or potential threats

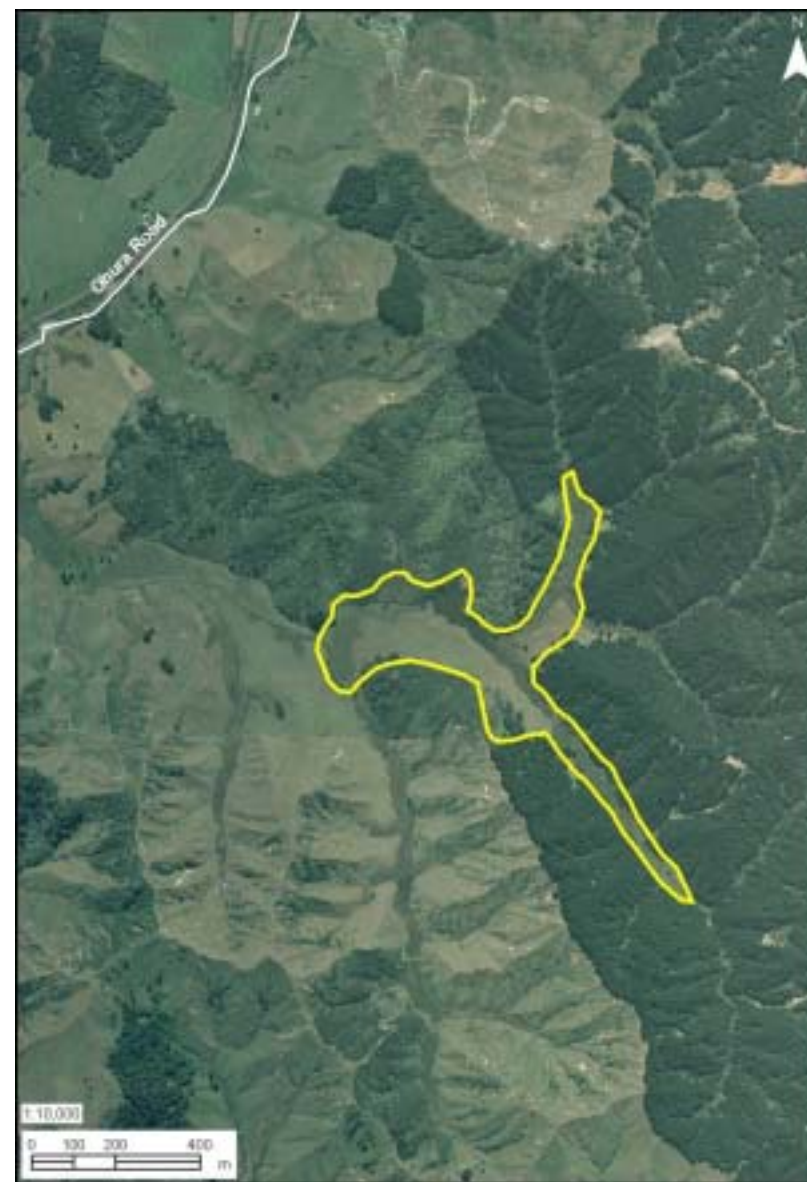
### Management threats and response

Potential and actual threats to the sustainability of Ohura Road 1's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Medium to high	Possums, cats, rabbits, mustelids, goats, pigs, and hedgehogs
Weeds	Low to medium	Small infestations of willow
Habitat modification	Medium	The wetland is unfenced with the west bank open to grazing. Vegetation clearance, drainage and forestry activities are also potential threats

Site protection measures addressing potential threats and actual threats are as follows:

Site protection	Yes/No	Description
A	No	Public ownership or formal agreement
B	Yes	General regional or district rules might apply
C	No	Active protection





## Okau Scenic Reserve

At a glance (last updated: February 2006)			
TRC reference:	0855-0	Ecological district:	North Taranaki
Other reference:	DOC 70492	LENZ environment:	F5.2a (11.9 ha) F7.2a (2.7 ha)
Land tenure:	Crown	Protection status:	A, B, C
GPS:	2664800E – 6250697N	Area:	14.3 ha

### Location

The Crown owned Okau Scenic Reserve is located 35 km east of Urenui. The Reserve lies in the North Taranaki Ecological District.

### General description

The Okau Scenic Reserve includes a small (14.3 ha) forested hill and a palustrine wetland. It is administered by the Department of Conservation and predominantly lies on river flats on the poorly drained Mount Damper plateau.



### Ecological features

#### Vegetation

There are 134 plant species present in the Okau Scenic Reserve. In the wetland *Carex* species dominate, including the large tussocks of *Carex virgata* and *Carex secta*. There is also an area of kahikatea (*Dacrycarpus dacrydioides*) over dense herbaceous vegetation.

#### Fauna

Notable birdlife present in the Okau Scenic Reserve include the 'At Risk (Sparse)' fernbird (*Bowdleria punctata vealeae*), which is particularly uncommon in Taranaki. New Zealand pigeon (*Hemiphaga novaeseelandiae*),

which is identified as being 'Chronically Threatened (Gradual Decline)', is also present.

### Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	Medium	Regionally distinctive in that it contains the 'At Risk' and regionally uncommon fernbird Also contains the 'Chronically Threatened' New Zealand pigeon
Representativeness	Low	Contains indigenous vegetation on 'Acutely Threatened' (F5.2a) and 'At Risk' (F7.2a) LENZ environments
Ecological context	Medium	Contains core habitat for the threatened wood pigeon and fernbird, and is close to and interconnected with other areas of indigenous forest
Sustainability	Positive	In relatively good vegetative condition. Key ecological processes still influence the site. Under appropriate management, it can remain resilient to existing or potential threats

### Management threats and response

Potential and actual threats to the sustainability of Okau Scenic Reserve's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Medium to high	Possums, goats, cats, mustelids, and rats
Weeds	Low to medium	Blackberry and willow
Habitat modification	Medium	Stock encroachment is a threat on the western and southern boundaries

Site protection measures addressing potential threats and actual threats are as follows:

Site protection	Yes/No	Description
<b>A</b>	Yes	Public Conservation Estate (Scenic Reserve)
<b>B</b>	Yes	Site specific rules apply – Taranaki Regional Council rules for wetlands (refer Appendix IIA of the Regional Fresh Water Plan) General regional or district rules might also apply
<b>C</b>	Yes	Partially fenced



# Okoki

At a glance (last updated: February 2006)			
<b>TRC reference:</b>		<b>Ecological district:</b>	North Taranaki
<b>Other reference:</b>	NPDC SNA 8	<b>LENZ environment:</b>	C1.2a (0.4 ha) F1.1b (84.3 ha) F5.2a (6.7 ha) F7.2a (2.6 ha)
<b>Land tenure:</b>	Private	<b>Protection status:</b>	B
<b>GPS:</b>	2635068E – 6244991N	<b>Area:</b>	94.0 ha

## Location

Okoki is located on privately owned land, 3.4 km north-east of Urenui. It lies in the North Taranaki Ecological District.

## General description

Okoki is a relatively large (94 ha) area of primary and secondary semi-coastal forest adjoining the lower reaches of the Urenui River. It contains a variety of forest types of high naturalness, with good regeneration and high species diversity.

Another Key native ecosystem – Okoki Pa Historic reserve – adjoins this site on the western end.

## Ecological features

### Vegetation

Canopy vegetation at Okoki comprises predominantly of tawa (*Beilschmiedia tawa*) – puriri (*Vitex lucens*) – rewarewa (*Knightia excelsa*) forest on the drier hill slopes and ridges. On the colluvial hillslope and alluvial terrace tawa – pukatea (*Laurelia novaezelandiae*) forest is present.

Other common vegetation types include mamaku (*Cyathea medullaris*) – mahoe (*Melicytus ramiflorus*) – pigeonwood (*Hedycarya arborea*), mamaku (*Cyathea medullaris*). Gorse is also present.

### Fauna

Unknown. No specific indigenous fauna species have been recorded for Okoki.

## Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	Low	Not known to contain any 'Acutely Threatened' species or species uncommon in Taranaki
Representativeness	High	Contains indigenous vegetation on 'Acutely Threatened' (F5.2a, C1.2a) and 'At Risk' (F7.2a) LENZ environments
Ecological context	Medium	Range of ecosystem types and provides connection between coastal and inland habitats. Adjoins the Okoki Pa Historic Reserve
Sustainability	Positive	In relatively good vegetative condition. Key ecological processes still influence the site. Under appropriate management, it can remain resilient to existing or potential threats

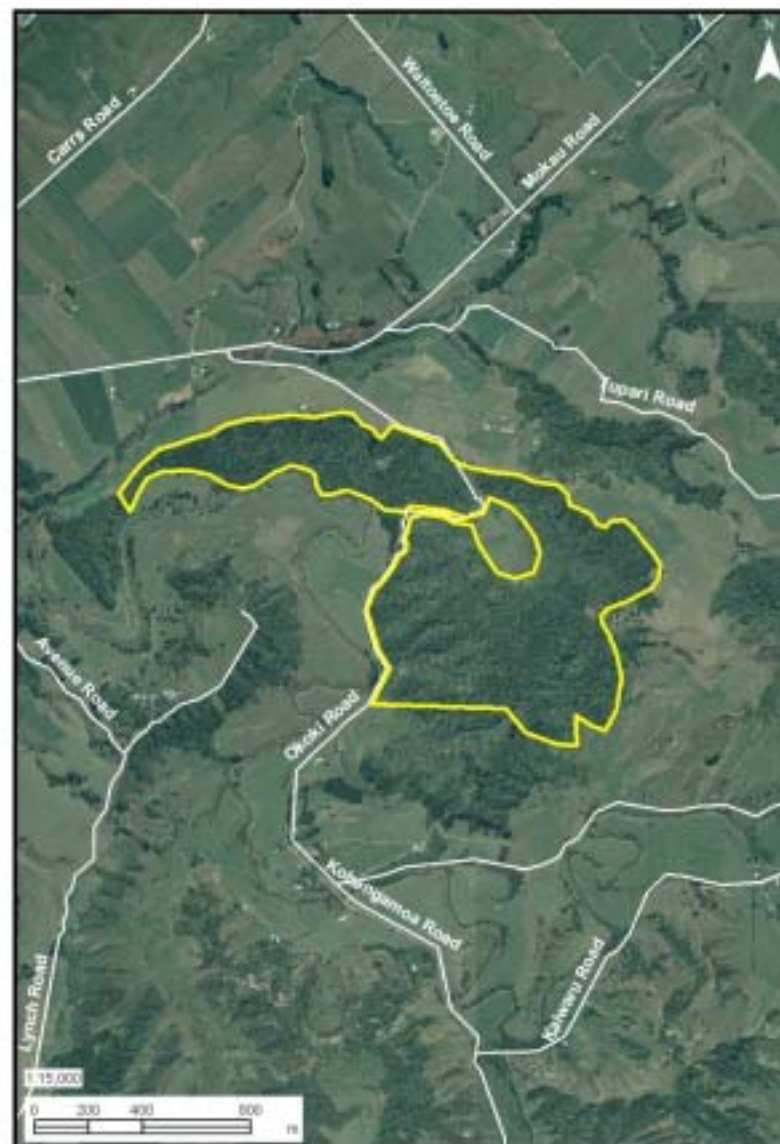
## Management threats and response

Potential and actual threats to the sustainability of Okoki's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Low to medium	Possums, cats, mustelids, and rats
Weeds	Low	Gorse
Habitat modification	Low	

Site protection measures addressing potential threats and actual threats are as follows:

Site protection	Yes/No	Description
A	No	Public ownership or formal agreement
B	Yes	Site specific rules apply – New Plymouth District Council rules for Significant Natural Areas (refer Appendix 21 of the District Plan) General regional or district rules might also apply
C	No	Active protection



## Okoki Pa Historic Reserve

At a glance (last updated: February 2006)			
<b>TRC reference:</b>		<b>Ecological district:</b>	North Taranaki
<b>Other reference:</b>	DOC 70520, LD No 48	<b>LENZ environment:</b>	F1.1b
<b>Land tenure:</b>	Crown	<b>Protection status:</b>	A, B
<b>GPS:</b>	2633587-6245089	<b>Area:</b>	7.2 ha

### Location

The Crown owned Okoki Pa Historic Reserve is located 31 km north-east of New Plymouth. The Reserve lies in the North Taranaki Ecological District.

### General description

The Okoki Pa Historic Reserve is 7.2 ha in size and lies close to State Highway 3 and adjoins another Key Native Ecosystem – Okoki. The Reserve comprises of a flat topped hill with slopes rising steeply from the Urenui River flats on the eastern and south-western sides. The hill, which was last occupied as a pa in the 1820s, has reverted to secondary broadleaved semi-coastal forest. There is a memorial to Te Rangi Hiroa (Sir Peter Buck) in the form of a stylised Maori canoe prow on the edge of the forest.

### Ecological features

#### Vegetation

Canopy vegetation at the top platform (tihi) of the pa, comprises of rewarewa/New Zealand honeysuckle (*Knightia excelsa*), karaka (*Corynocarpus laevigatus*), and kohekohe (*Dysoxylum spectabile*) forest.

Additional species in the canopy include tawa (*Beilschmiedia tawa*), mahoe, puriri (*Vitex lucens*), and pukatea (*Laurelia novaezelandiae*). A planted kauri (*Agathis australis*) is also present.

#### Fauna

Unknown. No specific indigenous fauna species have been recorded for the Okoki Pa Historic Reserve.

### Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	Low	Not known to contain any 'Acutely Threatened' species or species uncommon in Taranaki
Representativeness	Low	LENZ environment not threatened
Ecological context	High	Important buffer and interconnected to another Key Native Ecosystem (Okoki), extending and increasing the size of that area
Sustainability	Positive	In relatively good vegetative condition. Key ecological processes still influence the site. Under appropriate management, it can remain resilient to existing or potential threats particularly if larger adjacent area of forest (Okoki) remains

### Other values

The Okoki Pa Historic Reserve also has historical and cultural values. It is an old pa site and contains a memorial to Te Rangi Hiroa.

### Management threats and response

Potential and actual threats to the sustainability of the Okoki Pa Historic Reserve's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Low to medium	Possums, cats, mustelids, and rats
Weeds	Low	
Habitat modification	Medium	Ancient pa site, now in regenerating forest

Site protection measures addressing potential threats and actual threats are as follows:

Site protection	Yes/No	Description
A	Yes	Public Conservation Estate (Historic Reserve)
B	Yes	General regional or district rules might apply
C		



## Omata Bush

At a glance (last updated: February 2006)			
<b>TRC reference:</b>		<b>Ecological district:</b>	Egmont
<b>Other reference:</b>	NPDC SNA 20	<b>LENZ environment:</b>	F5.2b
<b>Land tenure:</b>	Private	<b>Protection status:</b>	B, C
<b>GPS:</b>	2599132E – 6234328N	<b>Area:</b>	10.4 ha

### Location

Omata Bush is located on privately-owned land, 6.5 km east of Omata. It lies in the Egmont Ecological District.

### General description

Omata Bush is a small (10.4 ha) semi-coastal forest remnant in two convergent gullies with a ridge between them. It is located 1.5 km east of the Tank Farm Ponds (Lloyd Ponds) and 500 metres east of Barrett Lake Scenic Reserve.

### Ecological features

#### Vegetation

Canopy vegetation in the gullies is dominated by pukatea (*Laurelia novaezelandiae*) with occasional kareao/supplejack (*Ripogonum scandens*) and pate (*Schefflera digitata*). The understorey is in good condition and consists of dense tangles of supplejack (*Ripogonum scandens*), kiekie (*Freycinetia baueriana* subsp. *banksii*), and young puketea.

On the drier slopes and ridge, the canopy consists mainly of tawa (*Beilschmiedia tawa*), puriri (*Vitex lucens*) and kohekohe (*Dysoxylum spectabile*) with emergent rewarewa (*Knightia excelsa*).

#### Fauna

Unknown. No specific indigenous fauna species have been recorded for the Omata Bush.

### Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	Low	Not known to contain any 'Acutely Threatened' species, or species uncommon in Taranaki
Representativeness	High	Contains indigenous vegetation on F5.2b – an 'Acutely Threatened' LENZ environment
Ecological context	Medium	Close to and interconnected with Tank Farm Ponds (Lloyd Ponds) and Barrett Lake Scenic Reserve
Sustainability	Positive	In relatively good vegetative condition. Key ecological processes still influence the site. Under appropriate management, it can remain resilient to existing or potential threats

### Management threats and response

Potential and actual threats to the sustainability of Omata Bush's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Low to medium	Possums, cats, mustelids, and rats
Weeds	Low	
Habitat modification	Medium	Subdivision and clearance

Site protection measures addressing potential threats and actual threats are as follows:

Site protection	Yes/No	Description
<b>A</b> Public ownership or formal agreement	No	
<b>B</b> Regulatory protection by local government	Yes	Site specific rules apply – New Plymouth District Council rules for Significant Natural Areas (refer Appendix 21 of the District Plan) General regional or district rules might also apply
<b>C</b> Active protection	Yes	Fenced Self-help Possum Control Programme





## Onaero River Scenic Reserve

### At a glance (last updated: February 2006)

<b>TRC reference:</b>		<b>Ecological district:</b>	Egmont
<b>Other reference:</b>	DOC 70522, LD No 50	<b>LENZ environment:</b>	C1.2a
<b>Land tenure:</b>	Crown	<b>Protection status:</b>	A, B
<b>GPS:</b>	2628535E – 6244376N	<b>Area:</b>	3.9 ha

### Location

The Crown owned Onaero River Scenic Reserve lies approximately 25 km north-east of New Plymouth on the banks of the Onaero River approximately 200 metres from the rivermouth. The Reserve lies in the Egmont Ecological Region.

### General description

The Onaero River Scenic Reserve is a small (3.9 ha) coastal forest on the steep banks lining the Onaero River. The Reserve, which is administered by the Department of Conservation, adjoins a marginal strip (4 ha) which connects to the Mataro Scenic Reserve 12.5 ha away.

### Ecological features

#### Vegetation

The Onaero River Scenic Reserve comprises primarily of rewarewa (*Knightisa excelsa*), karaka (*Corynocarpus laevigatus*), and kowhai (*Sophora microphylla*) forest. The canopy, up to 8 metres in height, is dominated by karaka and kowhai with scattered emergent rewarewa. Kohekohe (*Dysoxylum spectabile*) is also present in the canopy while kawakawa (*Macropiper excelsum*) and hangehange (*Geniostoma rupestre* var. *ligustrifolium*), are the common understorey species.

The closed road in the north of the reserve was planted with 'natives' in the early 1960s and includes species not natural to the area including *Pomaderris apetala* and *Olearia paniculata*. Other species planted include pohutukawa (*Metrosideros excelsa*), rimu (*Dacrydium cupressinum*), and totara (*Podocarpus totara*).

There is a small wetland bisected by the road (State Highway 3) dominated by raupo (*Tyoha orientalis*) with toetoe (*Cortaderia* species), cabbage tree (*Cordyline australis*), and fuchsia (*Fuchsia excorticata*). On the northern side

this grades into a very small area of pukatea (*Laurelia novaezealandiae*) swamp forest.

The Reserve also contains the southern most record of Crimson rata (*Metrosideros carminea*).

### Fauna

Birdlife present include black shag (*Phalacrocorax carbo*), harrier hawk (*Circus approximans*), pukeko (*Porphyrio porphyrio melanotus*), and fantail (*Rhipidura fuliginosa placabilis*).

### Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Regionally distinctive in that it is the southern limit of <i>Metrosideros carminea</i>
Representativeness	High	Contains indigenous vegetation on C1.2a – an 'Acutely Threatened' LENZ environment
Ecological context	Medium	Coastal forest adjoining marginal strip (4ha) which connects to Mataro Scenic Reserve
Sustainability	Positive	Key ecological processes still influence the site. Needs appropriate management to remain resilient to existing and potential threats, particularly weeds

### Other values

The Reserve also contains an old pa site with well preserved earthworks.

### Management threats and response

Potential and actual threats to the sustainability of Onaero River Scenic Reserve's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Low-medium	Possums, cats, mustelids, and rats
Weeds	Medium	<i>Asparagus scandens</i> and abundant wattle in the south of the area
Habitat modification	Low to medium	Old pa site now regenerating. Some panting of natives not natural to the area

Site protection measures addressing potential threats and actual threats are as follows:

Site protection	Yes/No	Description
A	Yes	Public Conservation Estate (Scenic Reserve)
B	yes	General regional or district rules might apply
C	No	



## Otakeho Beach

At a glance (last updated: February 2006)		
TRC reference:	Ecological district:	Egmont
Other reference:	LENZ environment:	F5.2c
Land tenure: Crown	Protection status:	A, B, C
GPS: 2599521E – 6182308N	Area:	4.3 ha

### Location

Otakeho Beach is located 6.5 km west of Manaia and lies in the Egmont Ecological District.

### General description

Otakeho Beach comprises of foreshore and a marginal strip, which are administered by the Department of Conservation. It is a small sandy beach at the bottom of high cliffs. The area is 4.3 ha in size and is popular for fishing.

### Ecological features

#### Vegetation

Vegetation at the Otakeho Beach includes the 'At Risk (Range Restricted)' woollyhead *Craspedia* 'Otakeho'. This plant is found only in two sites in the North Island, both in Taranaki. The only other sites in New Zealand occur around Nelson.

#### Fauna

Unknown. No specific indigenous fauna species have been recorded for Otakeho Beach.

### Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Contains the 'At Risk' woollyhead <i>Craspedia</i> 'Otakeho' (range restricted). This is one of only two sites in the North Island where the plant is found
Representativeness	High	High quality example of indigenous vegetation on F5.2c – an 'Acutely Threatened' LENZ environment ecosystem
Ecological context	High	Provides core habitat for the regionally distinctive and threatened woollyhead <i>Craspedia</i> 'Otakeho'
Sustainability	Positive	In relatively good vegetative condition. Key ecological processes still influence the site. Under appropriate management, it can remain resilient to existing or potential threats

### Other Values

Otakeho Beach has recreational values of local significance and is a popular fishing spot.

### Management threats and response

Potential and actual threats to the sustainability of Otakeho Beach's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Low to medium	Possums, cats, mustelids, and rats
Weeds	Medium to high	Giant gunnera
Habitat modification	Low	Coastal erosion processes

Site protection measures addressing potential threats and actual threats are as follows:

Site protection	Yes/No	Description
A	Yes	Crown land (foreshore and marginal strip)
B	Yes	General regional or district rules might apply
C	Yes	<b>In part:</b> adjacent private land in the Self-help Possum Control Programme



## Patea Wetland

At a glance (last updated: February 2006)			
<b>TRC reference:</b>	1016-0	<b>Ecological district:</b>	Foxton
<b>Other reference:</b>	STDC SNA 23	<b>LENZ environment:</b>	C3.2d (1.1 ha) J4.2a (1.8 ha)
<b>Land tenure:</b>	Private	<b>Protection status:</b>	B
<b>GPS:</b>	2635800E – 6159696N	<b>Area:</b>	2.9 ha

### Location

The Patea Wetland is located on privately owned land on the southern outskirts of the Patea township. The wetland lies in the Foxton Ecological District.

### General description

The Patea Wetland is a small (2.9 ha) palustrine wetland, located in the centre of a grazed pasture. It is an ephemeral wetland, which dries up during the summer months.

### Ecological features

#### Vegetation

There is very little wetland vegetation present other than lake clubrush/kapungawha (*Schoenoplectus validus*) and rushes. Pasture species and a number of weeds are also present including Willow weed (*Polygonum persicaria*), paspallum (*Paspallum dilatatum*), and kikuyu grass (*Pennisetum clandestinum*).

#### Fauna

The Patea Wetland is the only known location habitat for tadpole shrimp (*Lepidurus apus*). The presence of tadpole shrimp is attributed to a lack of predatory fish.

The wetland is also used by many birds as a coastal stop-off point and, even though there is very little wetlands vegetation present on-site, the area provides a good habitat for wading birds such as the pied stilt (*Himantopus himantopus*).

## Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Regionally distinctive in that it is the only known location for tadpole shrimp in Taranaki
Representativeness	High	Contains indigenous vegetation on C3.2d and J4.2a – 'Acutely Threatened' LENZ environments
Ecological context	High	Core habitat for indigenous tadpole shrimp in Taranaki
Sustainability	Positive	Although very little wetland vegetation is present and it has been severely modified, key ecological processes still influence the site. Under appropriate management, it can remain resilient to existing or potential threats

## Management threats and response

Potential and actual threats to the sustainability of the Patea Wetland's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Low to medium	Possums, cats, mustelids, hedgehogs, rats and black swans
Weeds	Medium	Willow weed, paspallum and kikuyu grass
Habitat modification	Medium to high	Eutrophication is a threat due to being located in the centre of a farmed paddock The wetland is unfenced, and is grazed

Site protection measures addressing potential threats and actual threats are as follows:

Site protection	Yes/No	Description
<b>A</b> Public ownership or formal agreement	No	
<b>B</b> Regulatory protection by local government	Yes	Site specific rules apply – Taranaki Regional Council rules for wetlands (refer Appendix III of the Regional Fresh Water Plan) – South Taranaki District Council rules for Significant Natural Areas (refer Schedule II of the District Plan) General regional or district rules might also apply
<b>C</b> Active protection	No	



# Pohokura Swamp

At a glance (last updated: February 2006)			
<b>TRC reference:</b>	1004-0	<b>Ecological district:</b>	Matemateaonga
<b>Other reference:</b>	DOC 70303	<b>LENZ environment:</b>	F5.2a (0.2 ha) F7.2a (5.8 ha)
<b>Land tenure:</b>	Private	<b>Protection status:</b>	B
<b>GPS:</b>	2653878E – 6224401N	<b>Area:</b>	6.0 ha

## Location

The Pohokura Swamp is located on privately owned land, 38 km north-east of Stratford. The swamp lies in the Matemateaonga Ecological District.

## General description

The Pohokura Swamp is a long thin gully, 6.0 ha in area. The swamp, which was previously cleared, now contains secondary induced vegetation and is surrounded by pine plantations on the northern side and dry stock property on the southern side.

## Ecological features

### Vegetation

Vegetation within the swamp consists predominantly of raupo reedland (*Typha orientalis*) and kahikatea (*Dacrycarpus dacrydioides*) in the lower reaches.

Exotic species such as willow (*Salix*) and blackberry (*Rubus fruticosus*) are also apparent in and around the wetland.

### Fauna

The swamp provides habitat for spotless crane (*Porzana tabuensis plumbea*), which has been identified as being 'At Risk (Sparse)' nationally. The spotless crane is particularly uncommon in Taranaki.

## Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Contains the 'At Risk' spotless crane, which is particularly uncommon in Taranaki
Representativeness	Medium to high	Contains indigenous vegetation on 'Acutely Threatened' (F5.2a) and 'At Risk' (F7.2a) LENZ environments
Ecological context	High	Provides habitat for the at risk spotless crane, close to series of similar wetlands at Te Wera Covenants
Sustainability	Positive	In relatively good vegetative condition. Key ecological processes still influence the site. Under appropriate management, it can remain resilient to existing or potential threats

## Management threats and response

Potential and actual threats to the sustainability of the Pohokura Swamp's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Medium to high	Possums, cats, mustelids, pigs, goats, hedgehogs, and rats
Weeds	Medium	Willows and blackberry
Habitat modification	Medium	Southern parts of the wetland are accessible to livestock. Effects associated with forestry operations in adjacent areas may be a problem in the future

Site protection measures addressing potential threats and actual threats are as follows:

Site protection	Yes/No	Description
A	No	Public ownership or formal agreement
B	Yes	Site specific rules apply – Taranaki Regional Council rules for wetlands (refer Appendix III of the Regional Fresh Water Plan) General regional or district rules might also apply
C	No	Active protection





## Pouiatoa Conservation Area

At a glance (last updated: February 2006)		
TRC reference:	Ecological district:	North Taranaki
Other reference: DOC 70018	LENZ environment:	D2.3a (20.6 ha) F1.1b (3,073.2 ha) F1.1c (91.1 ha) F1.1d (390.1 ha) F5.2a (8.9 ha) F7.2a (295.2 ha)
Land tenure: Crown	Protection status:	A, B
GPS:	Area:	3,879.1 ha

### Location

The Crown owned Pouiatoa Conservation Area is located 11 km south-east of Urenui. It lies in the North Taranaki Ecological District.

### General description

The Pouiatoa Conservation Area is a large (3,879.1 ha) area of primary and induced forest types administered by the Department of Conservation. It encompasses a range of landforms and the headwaters of the Urenui River and minor sub-catchments of the Waitara River. The outlying occurrences of both black beech and hard beech represent the transition zones between the large tracts of hard beech forest further north and the black beech forest of the Matemateaonga Ecological District further south.

### Ecological features

#### Vegetation

The Pouiatoa Conservation Area contains one of the southern most stands of hard beech (*Nothofagus truncata*) in the North Taranaki Ecological District – marking the northern boundary of a hard beech ‘gap’ between Taranaki and the western foothills of the Tararua Ranges. It also contains the largest concentration of black beech (*Nothofagus solandri*) in North Taranaki Ecological District.

The Conservation Area is a good representation of the Urenui Siltstone steepplands and associated dry ridge forest type where tawa (*Beilschmiedia*

*tawa*) and rimu (*Dacrydium cupressinum*) are secondary in importance to kamahi (*Weinmania racemosa*), hinau (*Elaeocarpus dentatus*), rewarewa (*Knightia excelsa*), miro (*Prumnopitys ferruginea*), and thin-barked totara (*Podocarpus hallii*). This type provides a marked contrast to the adjacent beech forest ridges.

The well advanced stands of induced kanuka (*Kunzea ericoides* var. *ericoides*) forest are an uncommon forest type in the North Taranaki Ecological District and rare on such a large scale. Pukatea (*Laurelia novae-zelandiae*)-dominant forest and a semi-coastal outlier of tawa (*Beilschmiedia tawa*) and kohekohe (*Dysoxylum spectabile*) forest, are both present on gentle dipslopes. Of note is that the area contains and is the southern limit in the North Island of the club moss *Lycopodium deuterodensum*.

#### Fauna

Native birdlife present in the Pouiatoa Conservation Area include the New Zealand falcon (*Falco novaeseelandiae*), which is identified as ‘Acutely Threatened (Nationally Vulnerable)’. Other notable birdlife includes the Chronically Threatened (Serious Decline)’ North Island brown kiwi (*Apteryx australis mantelli*), and the ‘Chronically Threatened (Gradual Decline)’ New Zealand pigeon (*Hemiphaga novaeseelandiae*).

### Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Contains the ‘Acutely Threatened’ New Zealand falcon Also contains the ‘Chronically Threatened’ North Island brown kiwi and New Zealand pigeon
Representativeness	High	Contains indigenous vegetation on ‘Acutely Threatened’ (F5.2a) and ‘At Risk’ (D2.3a, F1.1c, F7.2a) LENZ environments
Ecological context	High	Very large area providing a range of core habitats for threatened and other species
Sustainability	Positive	In very good vegetative condition. Self sustaining forest. Key ecological processes still influence the site. Under appropriate management, it can remain resilient to existing or potential threats

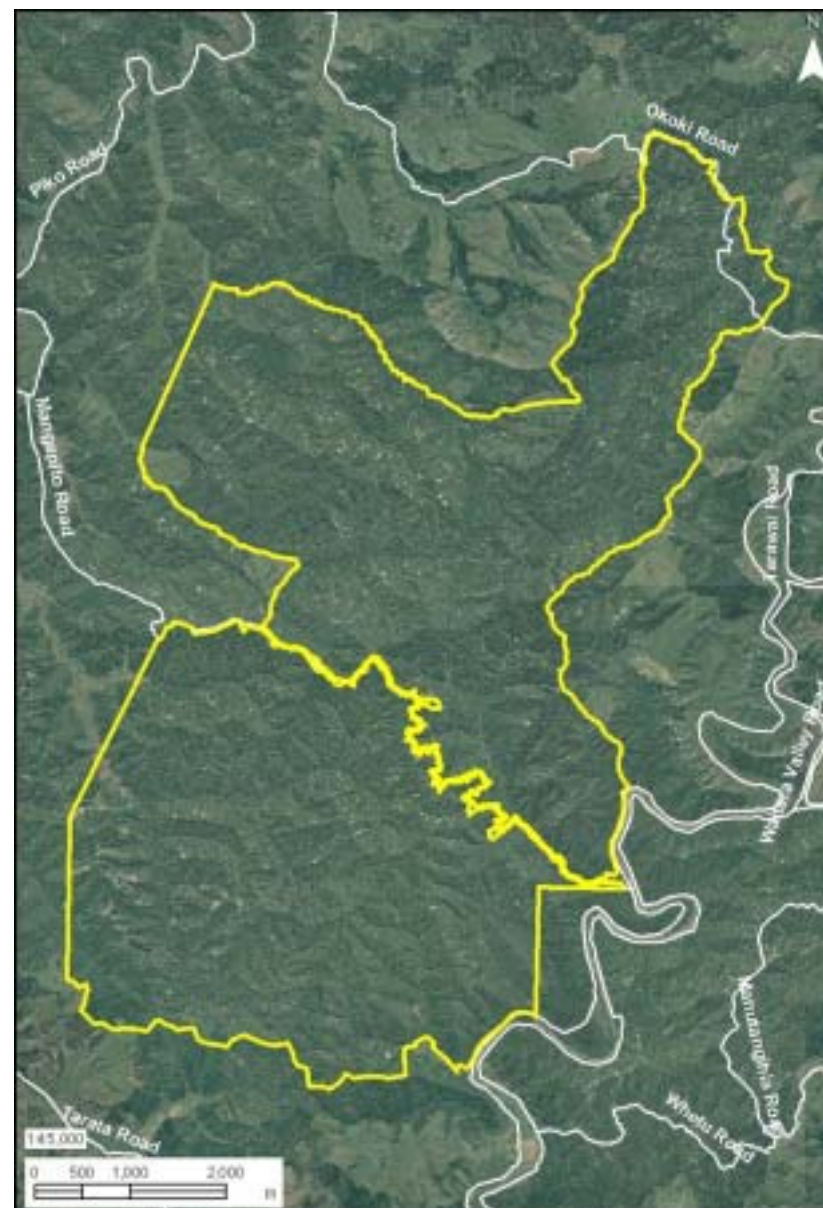
## Management threats and response

Potential and actual threats to the sustainability of Pouiatoa's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Medium	Possoms, goats, cats, mustelids, and rats
Weeds	Low	
Habitat modification	Low	

Site protection measures addressing potential threats and actual threats are as follows:

Site protection	Yes/No	Description
A Public ownership or formal agreement	Yes	Public conservation estate (Conservation Area)
B Regulatory protection by local government	Yes	General regional or district rules might apply
C Active protection	No	



## Pou Tehia Historic Reserve and Tongaporutu Conservation Area

At a glance (last updated: February 2006)			
TRC reference:		Ecological district:	North Taranaki
Other reference:	LD No 45A	LENZ environment:	F1.1b (162.9 ha) C1.2a (1.3 ha)
Land tenure:	Crown	Protection status:	A, B
GPS:	2649073E – 6264824N	Area:	164.2 ha

### Location

The Crown owned Pou Tehia Historic Reserve and Tongaporutu Conservation Area adjoin State Highway 3, 51 km north-east of New Plymouth. Both areas lie in the North Taranaki Ecological District.

### General description

The Pou Tehia Historic Reserve and Tongaporutu Conservation Area have a combined area of 164.2 ha. Both areas are administered by the Department of Conservation.

To the west of State Highway 3, lies Pou Tehi Historic Reserve. The Reserve comprises of a sharp sandstone knob with coastal forest that is a Māori ancestral burial ground.

To the east of State Highway 3 lies the Tongaporutu Conservation Area, which support a small catchment of vigorously regenerating secondary coastal and semicoastal forest and scrub adjoining the Tongaporutu River.

### Ecological features

#### Vegetation

Canopy vegetation in the Pou Tehia Historic Reserve and Tongaporutu Conservation Area is dominated by karaka (*Corynocarpus laevigatus*), kohekohe (*Dysoxylum spectabile*), kowhai (*Sophora microphylla*), wharangi (*Melicope ternata*), titoki (*Alectryon excelsus*) and puriri (*Vitex lucens*), with occasional emergent rewarewa (*Knightia excelsa*).

Steep sandstone cliffs support rengarenga (*Arthropodium tenella*), *Olearia thomsonii*, flax (*Phormium cookianum*), manuka (*Leptospermum scoparium*), and karamu (*Coprosma robusta*).

#### Fauna

Unknown. No specific indigenous fauna species have been recorded for the Pou Tehia Historic Reserve and Tongaporutu Conservation Area.

### Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	Low	Not known to contain any 'Acutely Threatened' species or species uncommon in Taranaki
Representativeness	High	Contains small area of indigenous vegetation on C1.2a – an 'Acutely Threatened' LENZ environment
Ecological context	Medium	One of few areas in region that support true coastal vegetation. Close to Kawau Pa, 9 km from Mt Messenger forest
Sustainability	Positive	In good vegetative condition. Key ecological processes still influence the site. Under appropriate management it can remain resilient to existing or potential threats

### Other values

The Pou Tehia Historic Reserve and Tongaporutu Conservation Area adjoining State Highway 3 at the Tongaporutu Estuary, has locally important scenic attributes.

The Pou Tehia Historic Reserve also has significant cultural and historical values. Extensive Maori fortifications of a pa site are well preserved under regenerating vegetation. Chief Pou Tehia is buried on top of pa site and there is a memorial to Thomas McClutchie on top of pa site (cross and headstone).

## Management threats and response

Potential and actual threats to the sustainability of Pou Tehia Historic Reserve and Tongaporutu Conservation Area's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Low-medium	Cats, mustelids, rats, and possums
Weeds	Low-medium	Willow
Habitat modification	Low	Hydrangeas planted around burial ground on top of pa site. Part of Tongaporutu Conservation Area suffered a fire in the 1970s, now well regenerated

Site protection measures addressing potential threats and actual threats are as follows:

Site protection	Yes/No	Description
<b>A</b> Public ownership or formal agreement	Yes	Public Conservation Estate (Historic Reserve and Conservation Area)
<b>B</b> Regulatory protection by local government	Yes	General regional or district rules might apply
<b>C</b> Active protection	No	



# Pukatea

At a glance (last updated: February 2006)			
<b>TRC reference:</b>		<b>Ecological district:</b>	North Taranaki
<b>Other reference:</b>	NPDC SNA 7	<b>LENZ environment:</b>	C1.2a (8.2 ha) F1.1b (69.2 ha) F5.2a (9.8 ha) F7.2a (23.9 ha)
<b>Land tenure:</b>	Private	<b>Protection status:</b>	B
<b>GPS:</b>	2638887E – 6249024N	<b>Area:</b>	111.4 ha

## Location

Pukatea is located on privately-owned land, 9 km north of Urenui. It lies within the Egmont Ecological District.

## General description

Pukatea is a semi-coastal forest remnant (111.4 ha) on a variety of landforms, adjacent to the Mimi River and Mimi Scenic Reserve. It contains a number of rare and distinctive flora species.

## Ecological features

### Vegetation

Canopy vegetation in the gullies is dominated by pukatea (*Laurelia novae-zelandiae*) – tawa (*Beilschmiedia tawa*) and associated semi-coastal species such as kohekohe (*Dysoxylum spectabile*), kawakawa (*Macropiper excelsum*), nikau (*Rhopalostylis sapida*), and puriri (*Vitex lucens*).

Kareao/supplejack (*Ripogonum scandens*), mahoe (*Meliccytus ramiflorus*) and pigeonwood (*Hedycarya arborea*) are also present on the drier hill slopes. Some previously cleared land has reverted to manuka shrubland.

There is a small area of pukatea forest on the alluvial terrace with abundant nikau. This forest type is now rare in North Taranaki. The site contains the only known occurrence of *Arthropteris tenella* in the North Taranaki Ecological District and, in the cliff vegetation, there is also a small population of *Brachyglottis turneri*, a lowland plant species of local distribution.

## Fauna

Unknown. No specific indigenous fauna species have been recorded for Pukatea.

## Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Regionally distinctive populations of the plants <i>Arthropteris tenella</i> and <i>Brachyglottis turneri</i>
Representativeness	High	Contains indigenous vegetation on 'Acutely Threatened' (C1.2a, F5.2a) and 'At Risk' (F7.2a) LENZ environments
Ecological context	Medium	Provides core habitat for the regional rare and distinctive plants <i>Arthropteris tenella</i> and <i>Brachyglottis turneri</i>
Sustainability	Positive	Key ecological processes still influence the site, compact shape and relatively large size. Under appropriate management, it can remain resilient to existing or potential threats

## Management threats and response

Potential and actual threats to the sustainability of Pukatea's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Low to medium	Possums, cats, mustelids, and rats
Weeds	Low	
Habitat modification	Low to medium	Natural barriers prevent livestock access to much of the area. However, grazing is a potential threat in some places, particularly along the northern boundary

Site protection measures addressing potential threats and actual threats are as follows:

Site protection	Yes/No	Description
A	No	Public ownership or formal agreement
B	Yes	Site specific rules apply – New Plymouth District Council rules for Significant Natural Areas (refer Appendix 21 of the District Plan) General regional or district rules might also apply
C	No	Active protection



## Puketapu Road End

At a glance (last updated: February 2006)		
TRC reference:	Ecological district:	Egmont
Other reference: RAP 138	LENZ environment:	F5.2c
Land tenure: Crown, district and private	Protection status:	A, B, C
GPS: 2589123E – 6186921N	Area:	10.6 ha

### Location

Puketapu Road End is located on Crown, district and private land, 9 km south of Opunake. The site is within the Egmont Ecological District.

### General description

Puketapu Road End is 10.6 ha in area and comprises of steep 30 – 40 metre cliffs, boulder and gravel beaches with a small herbfield towards the northern headland. The foreshore is Crown owned and administered by the Department of Conservation. Extending from the foreshore is an Esplanade Reserve, which is administered by the South Taranaki District Council. Parts of the site also extend onto private land.

### Ecological features

#### Vegetation

The steep cliffs are vegetated in taupata (*Coprosma repens*) with occasional emergent karaka (*Corynocarpus laevigatus*). Other canopy species include kawakawa (*Macropiper excelsum*) and flax (*Phormium tenax*). Due to the steepness of the cliffs the vegetation is in good condition.

The coastal herbfields contain a variety of very rare and notable plants including *Crassula manaia*, which is endemic to the Egmont – Waverley coast and is identified as 'Chronically Threatened (Gradual Decline)' nationally. The Acutely Threatened (Nationally Endangered) *C. peduncularis* and the non-threatened *C. sieberiana* are also present.

Other plants of note are the tiny flowered pygmy forget-me-not *Myosotis pygmaea 'minutiflora'*. This plant is very rare in the North Island and, in Taranaki, is restricted to a few coastal sites. The plant is also identified as 'Acutely Threatened (Nationally Vulnerable)' nationally. The Chronically Threatened (Serious Decline)' shore spurge *Euphorbia glauca* and the

Chronically Threatened (Gradual Decline) shore puha (*Sonchus kirkii*) are also present.

### Fauna

Puketapu Road End is one of four Taranaki sites known to contain the *Notoreas 'Taranaki'* an endemic moth that lives on the *Pimelea prostrata var. urvilleana*. This moth is only found in south Taranaki and north-west Nelson.

### Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Contains the 'Acutely Threatened' <i>Crassula peduncularis</i> and <i>Myosotis pygmaea 'minutiflora'</i>  Distinctive in that it contains the 'Chronically Threatened' and regionally rare pygmy forget-me-not ( <i>Myosotis pygmaea var. pygmaea</i> ) and the regionally endemic <i>Crassula manaia</i> . It also contains the moth <i>Notoreas 'Taranaki'</i> , which is only found in south Taranaki and north-west Nelson
Representativeness	High	Contains indigenous vegetation on F5.2c – an 'Acutely Threatened' LENZ environment
Ecological context	High	Provides core habitat for a regionally distinctive and threatened flora and fauna species
Sustainability	Positive	In good vegetative condition. Key ecological processes still influence the site. Under appropriate management, it can remain resilient to existing or potential threats

### Other Values

Puketapu Road End has recreational, amenity and historical and cultural values. It is a popular surfcasting and diving area. It also the historic pa of Papakaka Te Rangi and the Puketapu Redoubt.

## Management threats and response

Potential and actual threats to the sustainability of Puketapu Road End's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Low to medium	Possums, mustelids, cats, rats, and mice
Weeds	Low	
Habitat modification	Medium	Vehicular and pedestrian traffic Coastal erosion

Site protection measures addressing potential threats and actual threats are as follows:

Site protection	Yes/No	Description
<b>A</b> Public ownership or formal agreement	Yes	Crown land (foreshore) District Council land (Local Purpose Reserve)
<b>B</b> Regulatory protection by local government	Yes	General regional or district rules might apply
<b>C</b> Active protection	Yes	Self-help Possum Control Programme





## Puketoro wetlands and Makakaho ponds

At a glance (last updated: February 2006)			
<b>TRC reference:</b>	0988-0	<b>Ecological district:</b>	Matemateaonga
<b>Other reference:</b>	STDC SNA No. 29 STDC SNA No. 30	<b>LENZ environment:</b>	D2.3a (29.3 ha) F1.1c (31.9 ha) F1.1d (0.3 ha) F1.3a (0.1 ha) F 1.3b (9.6 ha) F7.2a (4.6 ha)
<b>Land tenure:</b>	Private	<b>Protection status:</b>	B, C
<b>GPS:</b>	The sites are located between the following co-ordinates:  2668549E – 6184131N  2675149E – 6177963N	<b>Area:</b>	75.8 ha

### Location

The Puketoro wetlands and Makakaho ponds are located on privately owned land, 32km north-east of Waverley. The wetlands lie in the Matemateaonga Ecological District.

### General description

The Puketoro wetlands and Makakaho ponds system is made up of 51 small lacustrine and palustrine wetlands scattered throughout an area of the eastern hill country. A series of small ponds, with extensive slump surfaces, the wetlands are surrounded by agriculture, forest, and scrubland. However, they provide a series of interconnected ecosystems for flora and fauna in the area and have a combined size of 75.8 ha.

### Ecological features

#### Vegetation

Vegetation in the Puketoro wetlands and Makakaho ponds area consists mainly of developed pasture, with some raupo (*Typha orientalis*) on lake margins.

### Fauna

Birdlife within the Puketoro wetlands and Makakaho ponds include the 'At Risk (Sparse)' spotless crane (*Porzana tabuensis plumbea*), fernbird (*Bowdleria punctata vealeae*), and New Zealand dabchick (*Poliiocephalus poliocephalus*). Spotless crane and fernbird are particularly uncommon in Taranaki.

### Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Contains the 'At Risk' spotless crane and fernbird, which are particularly uncommon in Taranaki Also contains the 'At Risk' New Zealand dabchick
Representativeness	Medium	Contains indigenous vegetation on D2.3a, F1.1c, F1.3a, F7.2a – all 'At Risk' LENZ environment
Ecological context	High	The wetland system is made up of 51 small, scattered wetlands providing a series of interconnected ecosystems for flora and fauna Also provides core habitat for the fernbird, spotless crane and New Zealand dabchick and other waterfowl.
Sustainability	Positive	In varying vegetative condition. Key ecological processes still influence the site. Under appropriate management, it can remain resilient to existing or potential threats

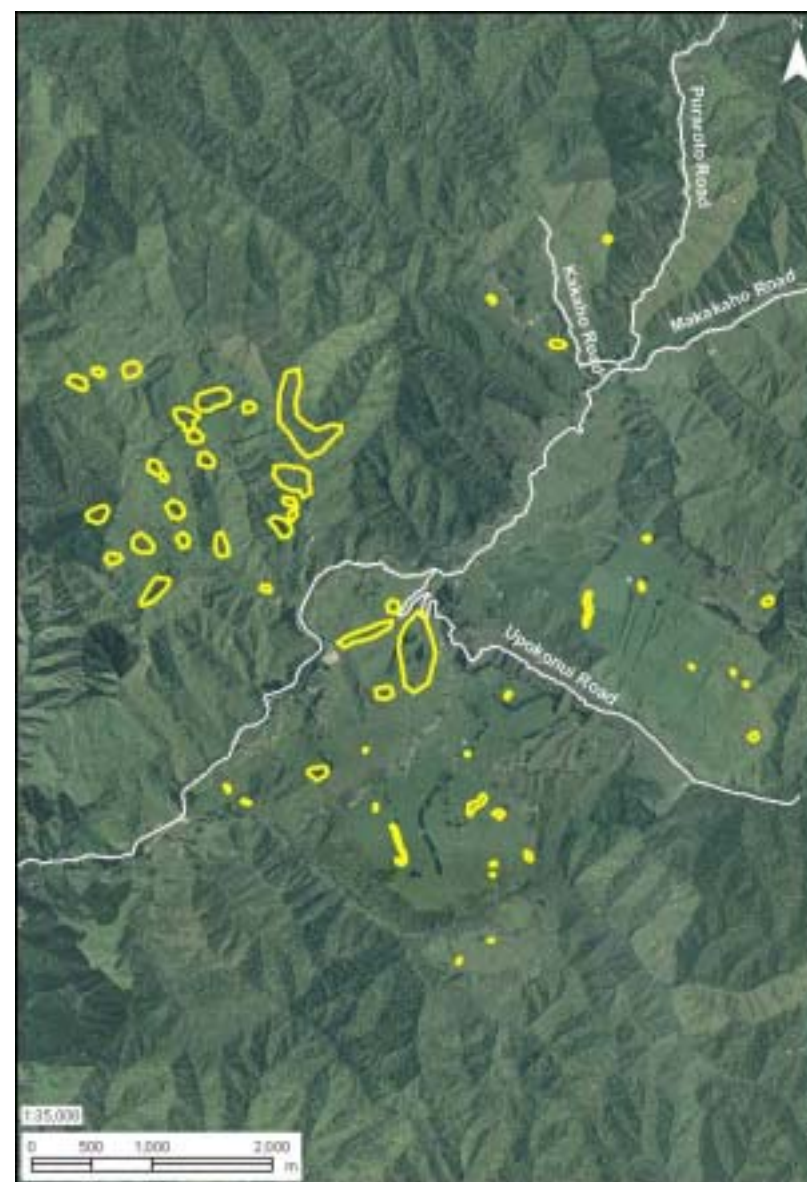
### Management threats and response

Potential and actual threats to the sustainability of Puketoro wetlands and Makakaho ponds' ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Medium to high	Possums, cats, goats, pigs, mustelids, hedgehogs, and rats
Weeds	Low	
Habitat modification	Medium to high	Most areas are unfenced and accessible to livestock

Site protection measures addressing potential threats and actual threats are as follows:

Site protection	Yes/No	Description
A	No	Public ownership or formal agreement
B	Yes	Site specific rules apply – South Taranaki District Council rules for Significant Natural Areas (refer Schedule II of the District Plan) General regional or district rules might also apply
C	Yes	Some fencing



## QEII Covenants 5/06/001A & 5/06/001B

At a glance (last updated: February 2006)			
<b>TRC reference:</b>	1023-0 1024-0	<b>Ecological district:</b>	Matemateaonga
<b>Other reference:</b>	QEII 5/06/001A QEII 5/06/001B	<b>LENZ environment:</b>	D2.3a (16.6 ha) F1.1b (43.3 ha) F1.1c (0.8 ha) F1.3b (280.1 ha) F5.2a (0.9 ha) F5.2c (6.2 ha) F7.2a (4.7 ha)
<b>Land tenure:</b>	Private	<b>Protection status:</b>	A, B, C
<b>GPS:</b>	2637483E – 6191098N	<b>Area:</b>	352.6 ha

### Location

This site is on privately owned land and is covered by two QEII covenants (5/06/001A and 5/06/001B). The site is located 15.2 km south-east of Eltham, on the northern end of Lake Rotorangi, and lies within the Matemateaonga Ecological District.

### General description

These two QEII Covenants cover a large (352.6 ha) area of lowland podocarp/hardwood forest. Covenant 5/06/001A has a Forest & Bird lodge within it, and a walking track to Lake Rotorangi.

### Ecological features

#### Vegetation

Tawa (*Beilschmiedia tawa*) forest is the predominant vegetation type in the covenanted areas. Kamahi (*Weinmannia racemosa*) is a common canopy associate.

#### Fauna

The New Zealand falcon (*Falco novaeseelandiae*) has been seen rearing young in QEII Covenant 5/06/001A. This bird is identified as 'Acutely Threatened (Nationally Vulnerable).

Other threatened birds found in the covenanted areas are the North Island brown kiwi (*Apteryx australis mantelli*), which is identified as 'Chronically Threatened (Serious Decline)', and the New Zealand pigeon (*Hemiphaga novaeseelandiae*), which is identified as 'Chronically Threatened (Gradual Decline).

Also present are the bellbird (*Anthornis melanura*), fantail (*Rhipidura fuliginosa*), grey warbler (*Gerygone igata*), whitehead (*Mohoua albicilla*), tui (*Prosthemadera novaeseelandiae*), shining cuckoo (*Chrysococcyx lucidus*), harrier hawk (*Circus approximans*), tomtit (*Petroica macrocephala*), and New Zealand kingfisher (*Halcyon sancta vagans*).

### Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Contains the 'Acutely Threatened' New Zealand falcon Also contain the 'Chronically Threatened' North Island brown kiwi and New Zealand pigeon
Representativeness	Medium	Contains indigenous vegetation on 'Acutely Threatened' (F5.2a) and 'At Risk' (D2.3a, F1.1c, F7.2a) LENZ environments
Ecological context	High	Large site covering a range of ecosystem types. It provides core habitat for the threatened New Zealand falcon, North Island brown kiwi and New Zealand wood pigeon
Sustainability	Positive	In good vegetative condition. Large area. Key ecological processes still influence the site. Under appropriate management, it can remain resilient to existing or potential threats

### Management threats and response

Potential and actual threats to the sustainability of the QEII Covenant 5/06/001A & 5/06/001B sites' ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Medium to high	Possums, goats, cats, mustelids, and rats
Weeds	Low	
Habitat modification	Low	Formally protected and partially fenced

Site protection measures addressing potential threats and actual threats are as follows:

Site protection	Yes/No	Description
A	Yes	Public ownership or formal agreement QEII Covenants covering the whole site
B	Yes	Regulatory protection by local government General regional or district rules might apply
C	Yes	Active protection The site is partially fenced Forest & Bird carry out possum and mustelid control.



## QEII Covenant 5/06/018

At a glance (last updated: February 2006)			
<b>TRC reference:</b>	0895-0 1030-0	<b>Ecological district:</b>	Matemateaonga
<b>Other reference:</b>	QEII 5/06/018	<b>LENZ environment:</b>	F7.2a
<b>Land tenure:</b>	Private	<b>Protection status:</b>	A, B, C
<b>GPS:</b>	2655432E – 6224857N	<b>Area:</b>	12.0 ha

### Location

The QEII Covenant 5/06/018 site is located on privately owned land, 40 km north-east of Stratford. It lies in the Matemateaonga Ecological District.

### General description

The QEII Covenant 5/06/018 site covers a small area of palustrine lowland swamp and podocarp forest (12.0 ha). It is located close to the Awahou Scenic Reserve, Pohukura Swamp, and Te Wera Covenants.

### Ecological features

#### Vegetation

The swamp area of the site is mostly raupo (*Typha orientalis*) with some kahikatea (*Dacrycarpus dacrydioides*). Manuka (*Leptospermum scoparium*), *Carex secta* and *Coprosma* sp. grow on the edge of the swamp.

#### Fauna

Birds found within this Covenant area include the 'Acutely Threatened (Nationally Endangered)' grey duck (*Anas superciliosa*), and the 'At Risk (Sparse)' fernbird (*Bowdleria punctata vealeae*), and spotless crane (*Porzana tabuensis plumbea*). Fernbird and spotless crane are particularly uncommon in Taranaki.

Other birdlife present include is the whitehead (*Mohoua albicilla*).

### Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Contains the 'Acutely Threatened' grey duck and the regionally uncommon and 'At Risk' spotless crane and fernbird
Representativeness	Medium	Contains indigenous vegetation on F7.2a – an 'At Risk' LENZ environment
Ecological context	High	Provides habitat for the nationally endangered grey duck. Also located close to the Awahou Scenic Reserve, Pohukura Swamp and Te Wera Covenants
Sustainability	Positive	In good vegetative condition. Key ecological processes still influence the site. Under appropriate management, it can remain resilient to existing or potential threats

### Management threats and response

Potential and actual threats to the sustainability of the QEII Covenant 5/06/018 site's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Medium to high	Possums, goats, cats, mustelids, hedgehogs, and rats
Weeds	Low	Willow
Habitat modification	Low	May be an issue and a requirement for fencing if land clearance on northern side occurs

Site protection measures addressing potential threats and actual threats are as follows:

Site protection	Yes/No	Description
<b>A</b>	Yes	Public ownership or formal agreement QEII Covenant covering the whole site
<b>B</b>	Yes	Regulatory protection by local government Site specific rules apply – Taranaki Regional Council rules for wetlands (refer Appendix IIA of the Regional Fresh Water Plan) General regional or district rules might also apply
<b>C</b>	Yes	Active protection Part of the site is fenced



## QEII Covenant 5/06/026

At a glance (last updated: February 2006)			
TRC reference:	1041-0	Ecological district:	North Taranaki
Other reference:	QEII 5/06/026	LENZ environment:	F5.2a (6.5 ha) F7.2a (20.6 ha)
Land tenure:	Private	Protection status:	A, B, C
GPS:	2628800E – 6216800N	Area:	27.1 ha

### Location

The QEII Covenant 5/06/026 site is located on privately owned land, 18 km north-east of Stratford, at the northern end of Stanley Road. The site lies in the North Taranaki Ecological District.

### General description

The QEII Covenant 5/06/026 site covers 27.1 ha of lowland tawa/podocarp forest. The forest has, in the past, been milled over, and the surrounding land cleared for farming. This is the largest area of bush for some distance around the Stratford area. The site is adjacent to a four hectare scenic reserve, which is of a similar forest type. There is a large block of indigenous forest about 4 km to the east of the site.

### Ecological features

#### Vegetation

Vegetation within the covenanted area is dominated by tawa (*Beilschmiedia tawa*), rewarewa (*Knightia excelsa*), rimu (*Dacrydium cupressinum*), miro (*Prumnopitys ferruginea*), five finger (*Pseudopanax arboreus*), kahikatea (*Dacrycarpus dacrydioides*), silver fern (*Cyathea dealbata*), mahoe (*Melicytus ramiflorus*), and laceback (*Hoheria sextylosa*). Tree ferns form the understorey.

#### Fauna

The site supports a wealth of native birds, including the North Island brown kiwi (*Apteryx australis mantelli*), which is identified as 'Chronically Threatened (Serious Decline)', and the New Zealand pigeon (*Hemiphaga novaseelandiae*), which is identified as 'Chronically Threatened (Gradual Decline)'.

Also present at the site are morepork (*Ninox novaeseelandiae*), tui (*Prosthemadera novaeseelandiae*), bellbird (*Anthornis melanura*), and grey warbler (*Gerygone igata*).

### Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	Medium	Contains the 'Chronically Threatened' North Island brown kiwi and New Zealand pigeon
Representativeness	High	Contains indigenous vegetation on 'Acutely Threatened' (F5.2a) and 'At Risk' (F7.2a) LENZ environments
Ecological context	Medium	Provides habitat for threatened indigenous species such as the North Island brown kiwi and the New Zealand wood pigeon. Also provides connectivity to a scenic reserve located close by
Sustainability	Positive	In good vegetative condition. Key ecological processes still influence the site. Under appropriate management, it can remain resilient to existing or potential threats

### Management threats and response

Potential and actual threats to the sustainability of the QEII Covenant 5/06/026 site's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Low	Possums, cats, mustelids, and rats
Weeds	Medium	Darwin's barberry
Habitat modification	Low	Formally protected and fenced

Site protection measures addressing potential threats and actual threats are as follows:

Site protection	Yes/No	Description
A	Yes	Public ownership or formal agreement QEII Covenant covering the whole site
B	Yes	Regulatory protection by local government General regional or district rules might apply
C	Yes	Active protection The site is fenced Enhancement planting ( <i>Coprosma robusta</i> ) to replace barberry





## QEII Covenants 5/06/040b, 5/06/040c and 5/06/081

At a glance (last updated: February 2006)			
<b>TRC reference:</b>	0890-0 1212-0, 1216-0, 1222-0	<b>Ecological district:</b>	Egmont
<b>Other reference:</b>	QEII 5/06/040b QEII 5/06/040c QEII 5/06/081	<b>LENZ environment:</b>	H1.3b
<b>Land tenure:</b>	Private	<b>Protection status:</b>	A, B, C
<b>GPS:</b>	2590304E – 6217721N 2590235E – 6217812N 2589972E – 6218833N	<b>Area:</b>	2.4 ha

### Location

This site covers three covenanted areas (QEII 5/06/04b, 5/06/040C and 5/06/081) on privately owned land, 7 km south-east of Okato. The covenanted areas lie in the Egmont Ecological District.

### General description

QEII 5/06/04b, 5/06/040C and 5/06/081 consists of three covenants on two small areas of remnant swamp forest (combined area of 2.4 ha). The forests overlie recent debris flow. They are situated off Saunders Road is a small area near Egmont National Park and the upper reaches of the Stony (Hangatahua) River and adjoins the Blue Rata Reserve.



### Ecological features

#### Vegetation

Vegetation within the QEII 5/06/081 and QEII 5/06/040B sites is mainly swamp forest, 35% of which is swamp maire (*Syzygium maire*).

Other canopy species include kamahi (*Weinmannia racemosa*), kahikatea (*Dacrycarpus dacrydiodes*), tawa (*Beilschmiedia tawa*), pigeonwood (*Hedycarya arborea*), mahoe (*Melicytus ramiflorus*) and a few rimu (*Dacrydium cupressinum*), and miro (*Prumnopitys ferruginea*).

Shrubs are found mainly around the edges of the forest and include hangehange (*Geniostoma rupestre* var. *ligustrifolium*), pate (*Schefflera digitata*), shining karamu (*Coprosma lucida*), karamu (*Coprosma robusta*), kanono (*Coprosma grandifolia*), lancewood (*Pseudopanax crassifolium*), and kanuka (*Kunzea ericoides* var. *ericoides*).

Lianes and epiphytes include kiekie (*Freycinetia baueriana* subsp. *banksii*), bush lawyer (*Rubus cissoides*), kapuka (*Griselinia littoralis*), supplejack (*Ripogonum scandens*), clematis (*Clematis paniculata*), rata (*Metrosideros fulgens*), white rata (*Metrosideros perforata*), astelia (*Astelia trinerva*), and collospermum (*Collospermum hastatum*). Tree ferns include mamaku (*Cyathea medullaris*) and wheki (*Dicksonia squarrosa*). Ground cover is a mix of ferns and seedlings.

Vegetation within the QEII 5/06/040C site is also mainly swamp forest, but with 50% kahikatea. Other canopy species include swamp maire, pukatea (*Laurelia novae-zelandiae*), miro, rimu, rewarewa (*Knightia excelsa*), tawa, pigeonwood, and kamahi. The sub-canopy consists of pate, hangehange, lancewood, tree fuchsia (*Fuchsia excorticata*) and karamu. Ground cover is again a mix of ferns and seedlings.

#### Fauna

Birdlife in the three QEII 'Saunders Road' sites includes New Zealand pigeon (*Hemiphaga novaeseelandiae*), which is identified as 'Chronically Threatened (Gradual Decline)'.

Bellbird (*Anthornis melanura melanura*), tui (*Prothemadera novaeseelandiae*), North Island fantail (*Rhipidura fuliginosa placabilis*), tomtit (*Petroica macrocephala*), and grey warbler (*Gerygone igata*) are also present.

## Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	Medium	Contains the 'Chronically Threatened' New Zealand pigeon
Representativeness	Medium	Contains indigenous vegetation on H1.3b – an 'Underprotected' LENZ environment
Ecological context	High	One of the sites effectively joins the Blue Rata Scenic Reserve adding a swamp maire element to the Reserve. Also close to Egmont National Park, providing linkage to lower altitude forests
Sustainability	Positive	Although small, it is in excellent vegetative condition. Key ecological processes still influence the sites. Under appropriate management, they can remain resilient to existing or potential threats

## Management threats and response

Potential and actual threats to the sustainability of the QEII 'Saunders Road' sites' ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Low to medium	Possums, feral cats, mustelids, and rats
Weeds	Low	Blackberry around forest edges
Habitat modification	Low	Partially fenced. However there is no livestock access

Site protection measures addressing potential threats and actual threats are as follows:

Site protection	Yes/No	Description
<b>A</b> Public ownership or formal agreement	Yes	QEII Covenant covering the whole site
<b>B</b> Regulatory protection by local government	Yes	Site specific rules apply – Taranaki Regional Council rules for wetlands (refer Appendix IIA of the Regional Fresh Water Plan) General regional or district rules might also apply
<b>C</b> Active protection	Yes	One wetland is fenced. The other is partially fenced (but there is no stock access) Self-help Possum Control Programme



## QEII Covenant 5/06/045

At a glance (last updated: February 2006)			
<b>TRC reference:</b>	0879-0 1047-0	<b>Ecological district:</b>	North Taranaki
<b>Other reference:</b>	NPDC – ID28097 QEII 5/06/045	<b>LENZ environment:</b>	C1.1a (0.9 ha) F1.1b (209.1 ha) F1.1d (23.2 ha) F 5.2a (3.4 ha) F7.2a (19.5 ha)
<b>Land tenure:</b>	Private	<b>Protection status:</b>	A, B, C
<b>GPS:</b>	2635900E – 6228300N	<b>Area:</b>	256.1 ha

### Location

The QEII Covenant 5/06/045 site is located on privately owned land, 30 km east of Inglewood on Toro Road, which is off Junction Road. The site lies in the North Taranaki Ecological District.

### General description

The QEII Covenant 5/06/045 site is a large forested area (256.1 ha), with many specimen trees. Some of the covenanted area is in pasture but most of it is lowland primary and secondary podocarp and hardwood forest. The area also includes a regionally significant wetland (7.5 ha). While this is a constructed wetland it provides habitat for a range of waterfowl. Indigenous vegetation cover is lowland tawa (*Beilschmiedia tawa*)–rimu (*Dacrydium cupressinum*) – kahikatea (*Dacrycarpus dacrydioides*) forest on hillslopes.



The Tarata Scenic Reserve (150 ha) is located 10 km to the west.

### Ecological features

#### Vegetation

Indigenous vegetation within the covenant area consists of tawa (*Beilschmiedia tawa*), rewarewa (*Knightia excelsa*), rimu (*Dacrydium cupressinum*), kahikatea (*Dacrycarpus dacrydioides*), pukatea (*Laurelia novaezealandiae*), hard beech (*Nothofagus truncata*), pigeonwood (*Hedycarya arborea*), kamahi (*Weinmannia racemosa*), thin barked totara (*Podocarpus hallii*), and rata (*Metrosideros robusta*).

Mahoe (*Melicytus ramiflorus*), rangiora (*Brachyglottis repanda*), lancewood (*Pseudopanax crassifolium*) and *Coprosma* species are present in the understorey, and ferns are predominant in the ground cover.

In the wetland raupo (*Typha orientalis*) reedland, sedges (*Carex* spp.), and flax (*Phormium tenax*) predominate.

#### Fauna

Notable birdlife present at the QEII Covenant 5/06/045 site are North Island brown kiwi (*Apteryx australis mantelli*), which is identified as 'Chronically Threatened (Serious Decline)'. Other birdlife present include whitehead (*Mohoua albicilla*) and Shining Cuckoo (*Chrysococcyx lucidus*).

### Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	Medium	Contains 'Chronically Threatened (Serious Decline)' North Island brown kiwi
Representativeness	High	Contains indigenous vegetation on 'Acutely Threatened' (F5.2a), 'Chronically Threatened' (C1.1a), and 'At Risk' (F7.2a) LENZ environments
Ecological context	Medium	Provides inland wetland habitat for waterfowl
Sustainability	Positive	A significantly large area in good and improving vegetative condition. Key ecological processes still influence the site. Under appropriate management, it can remain resilient to existing or potential threats

## Other values

The QEII Covenant 5/06/045 site has recreational walking tracks throughout the bush and a lodge available for accommodation. Pony clubs also use the bush as a stop off.

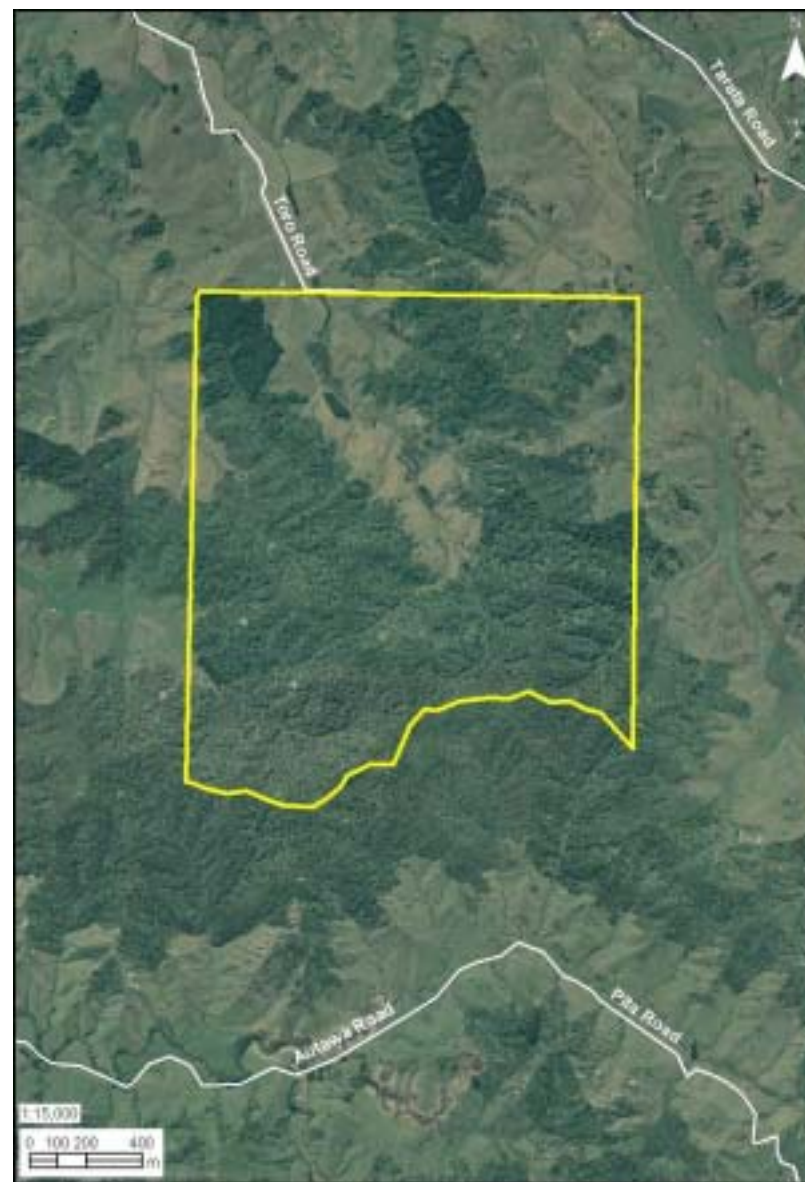
## Management threats and response

Potential and actual threats to the sustainability of the QEII Covenant 5/06/045 site's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Low	Possums, goats, cats, mustelids, and rats
Weeds	Low	Ragwort
Habitat modification	Low to medium	Formally protected. Stock and public access – some internal fencing required

Site protection measures addressing potential threats and actual threats are as follows:

Site protection	Yes/No	Description
<b>A</b> Public ownership or formal agreement	Yes	QEII Covenant covering the entire site
<b>B</b> Regulatory protection by local government	Yes	Site specific rules apply – Taranaki Regional Council rules for wetlands (refer Appendix IIA of the Regional Fresh Water Plan) – New Plymouth District Council rules for Significant Natural Areas (refer Schedule 21 of the District Plan) General regional or district rules might also apply
<b>C</b> Active protection	Yes	Some areas fenced



## QEII Covenant 5/06/067

### At a glance (last updated: February 2006)

TRC reference:	0897-0 1210-0	Ecological district:	Egmont
Other reference:	QEII 5/06/067	LENZ environment:	F5.2a
Land tenure:	Private	Protection status:	A, B, C
GPS:	2587000E – 6213000N	Area:	4.0 ha

### Location

The QEII Covenant 5/06/067 site is located on privately owned land 4.3 km from Parihaka and 7.1 km east of Pungarehu. The site is within the Egmont Ecological District.

### General description

The QEII Covenant 5/06/067 site is a lowland hardwood forest wetland and covers 4.0 ha. It lies within the semi-coastal to lowland bioclimatic zone of the Egmont Ecological District.

The covenant area lies on a lahar deposit, in a poorly drained basin that drains into the Waitotoroa Stream. Minor seasonal variations in water level in the wetlands are beneficial, as they provide extensive feeding and dabbling margins for a variety of bird species.



### Ecological features

#### Vegetation

The vegetation within the covenant area is predominantly swamp maire (*Syzygium maire*) – pukatea (*Laurelia novae zelandiae*) forest with some emergent kahikatea (*Dacrycarpus dacrydioides*).

Species found in the understorey include mahoe (*Meliccytus ramiflorus*), *Coprosma* species, hangehange (*Geniostoma rupestre* var. *ligustrifolium*), lancewood (*Pseudopanax crassifolium*), wineberry (*Aristotelia serrata*), pate (*Schefflera digitata*), wheki (*Dicksonia squarrosa*), manuka (*Leptospermum scoparium*), cabbage tree (*Cordyline australis*), pigeonwood (*Hedycarya arborea*), kamahi (*Weinmannia racemosa*), and poroporo (*Solanum laciniatum*).

Climbers include supplejack (*Ripogonum scandens*), kiekie (*Freycinetia baueriana* subsp. *banksii*), and small white rata. A number of ferns are also present in the forest, including sickle spleenwort (*Asplenium polyodon*), drooping spleenwort (*A. flaccidum*), hen and chicken fern (*A. bulbiferum*), histiopteris (*Histiopteris incisa*), gully fern (*Pneumatopteris pennigera*), and *Blechnum* species.

Within the wetland area vegetation consists of raupo (*Tyoha orientalis*), *Carex secta*, *Juncus* species, and toetoe (*Cortaderia toetoe*).

### Fauna

No specific indigenous or exotic fauna species have been recorded for the QEII Covenant 5/06/067 site. However, the the wetland is noted as providing extensive feeding and dabbling margins for a variety of bird species.

### Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	Low	Not known to contain any 'Acutely Threatened' species or species uncommon in Taranaki
Representativeness	High	Contains indigenous vegetation on F5.2a – an 'Acutely Threatened' LENZ environment
Ecological context	Medium	Within developed farmland but provides a linkage for birds particularly wetland birds
Sustainability	Positive	In good and improving vegetative condition. Key ecological processes still influence the site. Under appropriate management, it can remain resilient to existing or potential threats

### Other values

The QEII Covenant 5/06/067 site also has historical and recreational values. It is near Parihaka Marae, which is of national historical and cultural significance. The lake may have once been used for recreational boating.

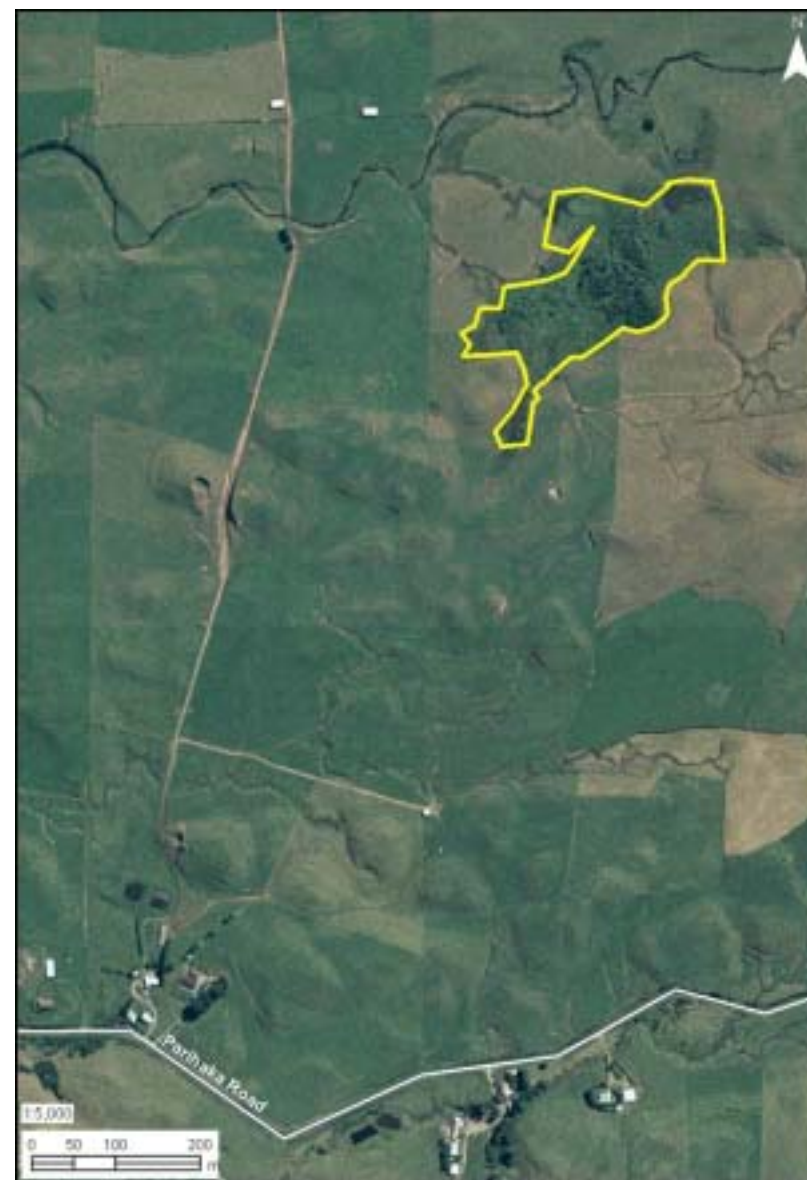
## Management threats and response

Potential and actual threats to the sustainability of the QEII Covenant 5/06/067 site's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Low to medium	Possums, cats, mustelids, and rats
Weeds	Low	Gorse and blackberry
Habitat modification	Low	Formally protected and fenced.

Site protection measures addressing potential threats and actual threats are as follows:

Site protection	Yes/No	Description
<b>A</b> Public ownership or formal agreement	Yes	QEII Covenant covers most of the site
<b>B</b> Regulatory protection by local government	Yes	Site specific rules apply – Taranaki Regional Council rules for wetlands (refer Appendix IIA of the Regional Fresh Water Plan) General regional or district rules might also apply
<b>C</b> Active protection	Yes	Covenant area is fenced and public access restricted Self-help Possum Control Programme



## QEII Covenant 5/06/102

At a glance (last updated: February 2006)			
TRC reference:	0096-0	Ecological district:	Egmont
Other reference:	QEII 5/06/102	LENZ environment:	H1.3a (0.4 ha) F5.2b (1.2 ha)
Land tenure:	Private	Protection status:	A, B, C
GPS:	2588300E – 6221000N	Area:	1.6 ha

### Location

The QEII Covenant 5/06/102 site is located on privately owned land, 2 km from Okato. The site lies in the Egmont Ecological District.

### General description

The QEII Covenant 5/06/102 site is a small (1.6 ha) lowland wetland forest remnant on flat to gently rolling country. The site is different to other covenant areas in the Egmont Ecological District as it has open water and a wetland as well as bush remnants on the side slopes.

The covenant area is approximately 40% bush, 30% lake, 25% wetland and 5% exotic trees, mainly old macrocarpa. The lake and wetland have been formed as a result of a small stream in a gully being partially dammed a long time ago. The lake is long and narrow and extends over the middle reaches of the gully. The wetland is at the lower end of the lake. Stock has been excluded for many years so the bush is in good condition. Corbett Lake Scenic Reserve is 2 km to the south.

### Ecological features

#### Vegetation

Canopy trees within the forest include kahikatea (*Dacrycarpus dacrydioides*), pukatea (*Laurelia novae-zelandiae*), puriri (*Vitex lucens*), and karaka (*Corynocarpus laevigatus*). The sub-canopy consists of mahoe (*Melicytus ramiflorus*), mapou (*Myrsine australis*), cabbage tree (*Cordyline australis*), tree ferns, pigeonwood (*Hedycarya arborea*), and poroporo (*Solanum aviculare*). Ground cover is predominantly young seedlings.

The wetland area at the lake outlet is dominated by raupo (*Typha orientalis*) and *Carex* species. Around the margins of the lake are small areas of raupo,

some *Carex secta*, with a few flax (*Phormium tenax*) plants along the north-east side.

#### Fauna

Threatened birdlife present in QEII Covenant 5/06/102 site are grey duck (*Anas superciliosa*), which is identified as 'Acutely Threatened (Nationally Endangered)' and New Zealand pigeon (*Hemiphaga novaeseelandiae*), which is identified as 'Chronically Threatened (Gradual Decline)'.

Other birdlife present includes bellbird (*Anthornis melanura melanura*), grey warbler (*Gerygone igata*), fantail (*Rhipidura fuliginosa*), black swan (*Cygnus atratus*), paradise shelduck (*Tadorna variegata*), mallard duck (*Anas platyrhynchos*), white faced heron (*Ardea novaehollandiae*), and pukeko (*Porphyrio porphyrio*).

### Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Contains the 'Acutely Threatened' grey duck Also contains the 'Chronically Threatened' New Zealand pigeon
Representativeness	High	Very small example of indigenous vegetation on 'Acutely Threatened' (H1.3a, F5.2b) LENZ environments
Ecological context	Medium	Small lakes are rare on the Egmont ring plain, particularly at this altitude on the western side. Also provides core habitat for the threatened grey duck and New Zealand pigeon
Sustainability	Positive	In excellent vegetative condition. Key ecological processes still influence the site. Under appropriate management, it can remain resilient to existing or potential threats

## Management threats and response

Potential and actual threats to the sustainability of the QEII Covenant 5/06/102 site's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Low to medium	Possums, cats, mustelids, and rats
Weeds	Low	Small amount of blackberry, barberry, wandering willy and willow
Habitat modification	Low	Formally protected and partially fenced

Site protection measures addressing potential threats and actual threats are as follows:

Site protection	Yes/No	Description
<b>A</b> Public ownership or formal agreement	Yes	QEII Covenant
<b>B</b> Regulatory protection by local government	Yes	General regional or district rules might apply
<b>C</b> Active protection	Yes	Fenced Supplementary planting Self-help Possum Control Programme





## QEII Covenant 5/06/121

At a glance (last updated: February 2006)			
TRC reference:	0256-0	Ecological district:	North Taranaki
Other reference:	QEII 5/06/121	LENZ environment:	F1.1b (96.6 ha) F1.1d (98.9 ha) F7.2a (51.1 ha)
Land tenure:	Private	Protection status:	A, B, C
GPS:	2651000E – 6245800N	Area:	246.6 ha

### Location

The QEII Covenant 5/06/121 site is located near Uruti. The site lies in the North Taranaki Ecological District.

### General description

The QEII Covenant 5/06/121 site is a large (246.6 ha) lowland primary and secondary podocarp/hardwood forest. Approximately 70% of the covenant area is lowland primary tawa/podocarp forest and the remaining 30% is lowland secondary mahoe – pigeonwood – kohekohe forest.

The forest is located at a wide valley face with topography ranging from flat to rolling to very steep on the valley sides. The Mironui Stream flows through the area with numerous catchments branching off. This stream flows into the Waitara River.

The forest is situated on the boundaries of the Makino Conservation Area to the north and the Rerekino Forest to the south. The Mironui Scenic Reserve is 2 km to the north-east and Waikekeho is 2.1 km to the west. The forest plays an important stabilising role for the easily eroded surrounding landforms. There are very few privately owned forests of this size that are protected.

### Ecological features

#### Vegetation

Vegetation is predominantly tawa (*Beilschmiedia tawa*) – podocarp forest. Many years ago the large podocarps were removed from a 25 ha section at the front (south) of the forest. This area has since regenerated with manuka (*Leptospermum scoparium*), which is now being taken over by mahoe

(*Melicytus ramiflorus*), pigeonwood (*Hedycarya arborea*), kohekohe (*Dysoxylum spectabile*), rewarewa (*Knightia excelsa*), and tree ferns.

The northern and largest section of the forested block consists mainly of large tawa. Other canopy species include rimu (*Dacrydium cupressinum*), miro (*Prumnopitys ferruginea*), and some large totara (*Podocarpus totara*). The subcanopy consists of lancewood (*Pseudopanax crassifolium*), mahoe, five finger (*Pseudopanax arboreus*), marbleleaf (*Carpodetus serratus*), *Coprosma* species, and tree ferns.

The groundcover is excellent with a wide range of species that include regenerating seedlings of the forest species and many different ferns.

#### Fauna

The QEII Covenant 5/06/121 site provides habitat for a number of bird species. Of particular note is the presence of New Zealand pigeon (*Hemiphaga novaeseelandiae*) and rifleman (*Acanthisitta chloris*), which are both identified as 'Chronically Threatened (Gradual Decline)'. Bellbird (*Anthornis melanura melanura*) are also present.

The streams provide habitat for many different invertebrate.

### Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	Medium	Contains the 'Chronically Threatened' New Zealand pigeon and rifleman
Representativeness	Medium	Contains indigenous vegetation on F7.2a – an 'At Risk' LENZ environment
Ecological context	High	The forest is on the boundary of the Waitara River and is an important part of the river's catchment. Provides linkage between the Makino and Rerekino Forests, which are ecologically similar
Sustainability	Positive	Large area in excellent and stable vegetative condition. Forest is totally self-sustaining. Key ecological processes still influence the site. Under appropriate management, it can remain resilient to existing or potential threats

### Other values

The QEII Covenant 5/06/121 site has recreational value. The Moki Track passes along the base of the large forest area.

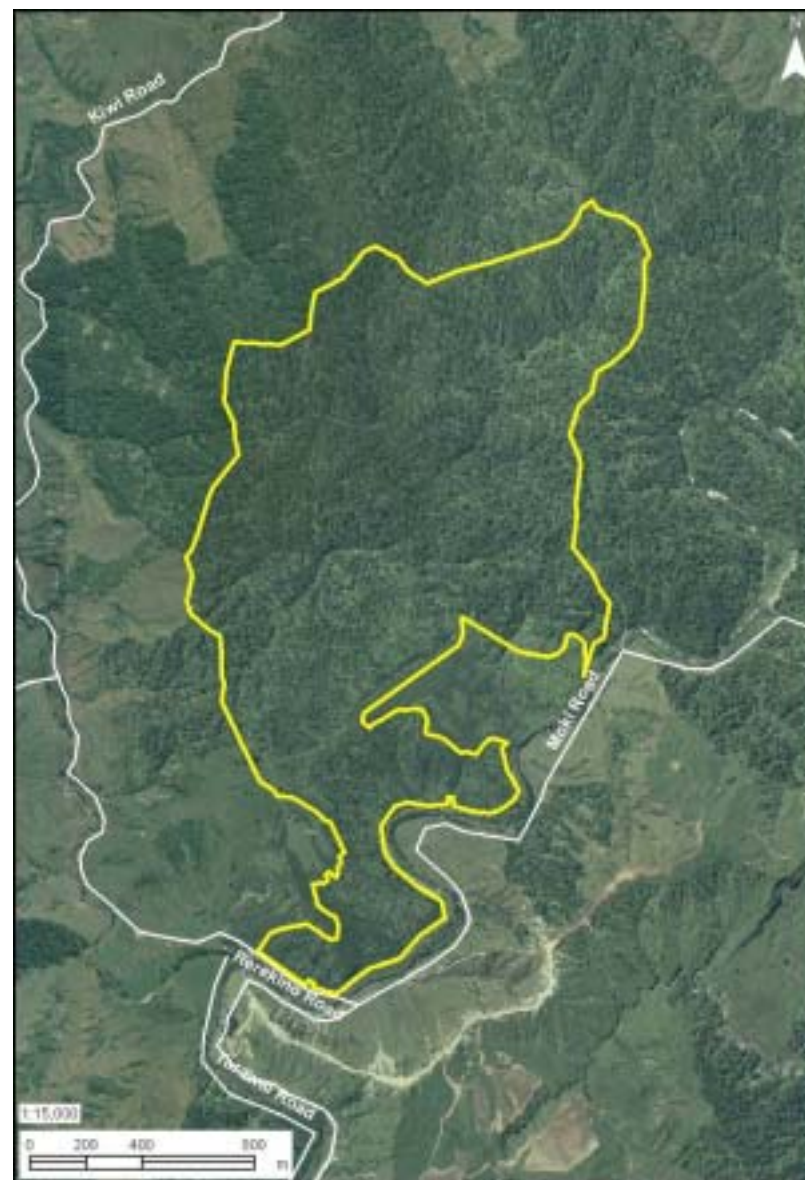
## Management threats and response

Potential and actual threats to the sustainability of the QEII Covenant 5/06/121 site's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Medium to high	Possums, goats, cats, mustelids, and rats
Weeds	Low	
Habitat modification	Low	Formally protected and fenced

Site protection measures addressing potential threats and actual threats are as follows:

Site protection	Yes/No	Description
<b>A</b> Public ownership or formal agreement	Yes	QEII Covenant covers the entire site
<b>B</b> Regulatory protection by local government	Yes	General regional or district rules might apply
<b>C</b> Active protection	Yes	Fenced



## QEII Covenant 5/06/148

At a glance (last updated: February 2006)			
TRC reference:	0186-0	Ecological district:	North Taranaki
Other reference:	QEII 5/06/148	LENZ environment:	F1.1b (13.8 ha) F1.1d (46.3 ha) F1.3b (3.7 ha) F7.2a (6.2 ha)
Land tenure:	Private	Protection status:	A, B, C
GPS:	2643800E – 6227600N	Area:	70.0 ha

### Location

The QEII Covenant 5/06/148 site is located on privately owned land at Purangi, 45 km east of Inglewood, close to Junction Road. The site lies in the North Taranaki Ecological District.

### General description

The QEII Covenant 5/06/148 site is a large area (70.0 ha) of remnant lowland modified forest covering a small catchment in medium to steep hill country which drains to the Waitara River. The Covenant site includes two small wetlands. The site contains large rimu and northern rata. The vegetation at the site is typical of what once covered the whole area. The site also has a high density of North Island brown kiwi. The site is surrounded by regenerating bush, forest, and some grazing land, and is near the Pouiatua Forest (administered by Department of Conservation), which is 5 km to the north of the site.

### Ecological features

#### Vegetation

Vegetation within the Covenant area is primarily rimu-rata / pukatea-tawa forest. Emergents include rimu (*Dacrydium cupressinum*) and rata (*Metrosideros robusta*), some very large individual trees. The canopy and understorey include species such as pukatea (*Laurelia novaezealandiae*), hinau (*Elaeocarpus dentatus*), pigeonwood (*Hedycarya arborea*), miro (*Prumnopitys ferruginea*), tawa (*Beilschmiedia tawa*), matai (*Prumnopitys taxifolia*), nikau (*Rhopalostylis sapida*), kamahi (*Weinmannia racemosa*),

manuka (*Leptospermum scoparium*), and kanuka (*Kunzea ericoides*). Narrow leaved maire (*Nestegis montana*) is found in one area of the forest.

The two wetlands are dominated by sedges (*Carex* spp.).

#### Fauna

The New Zealand falcon (*Falco novaeseelandiae*) has been seen nesting in the Covenant area. This bird is identified as 'Acutely Threatened (Nationally Vulnerable)'.

Also found in the Covenant area are the North Island brown kiwi (*Apteryx australis mantelli*), which is identified as 'Chronically Threatened (Serious Decline)', and the New Zealand pigeon (*Hemiphaga novaeseelandiae*) and rifleman (*Acanthisitta chloris*), both of which are identified as being 'Chronically Threatened (Gradual Decline)'.

The fernbird (*Bowdleria punctata vealeae*), which is identified as being nationally 'At Risk (Sparse)', has been heard within the Covenant area, but not seen. The fernbird is particularly uncommon in Taranaki.

Also present are tui (*Prosthemadera novaeseelandiae*), bellbird (*Anthornis melanura*), fantail (*Rhipidura fuliginosa*), whitehead (*Mohoua albicilla*), and tomtit (*Petroica macrocephala*).

Forest gecko (*Hoplodactylus granulatus*) has also been sighted in the area. This gecko is classified as 'Data Deficient' nationally.

### Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Contains the 'Acutely Threatened' New Zealand falcon and is regionally distinctive through the presence of forest geckos and the fernbird  Also contains the 'Chronically Threatened' North Island brown kiwi, New Zealand pigeon, and rifleman
Representativeness	Low to medium	Contains indigenous vegetation on F7.2a – an 'At Risk' LENZ environment
Ecological context	High	Is close to and interconnected with the nearby Pouiatua Forest. It also provides core habitat for a large number of threatened species
Sustainability	Positive	In very good vegetative condition. Large area in a circular shape. Key ecological processes still influence the site. Under appropriate management, it can remain resilient to existing or potential threats

### Other values

The Marahau Pa is located close to the QEII Covenant site, and the large loop in the Waitara River has cultural significance to Maori.

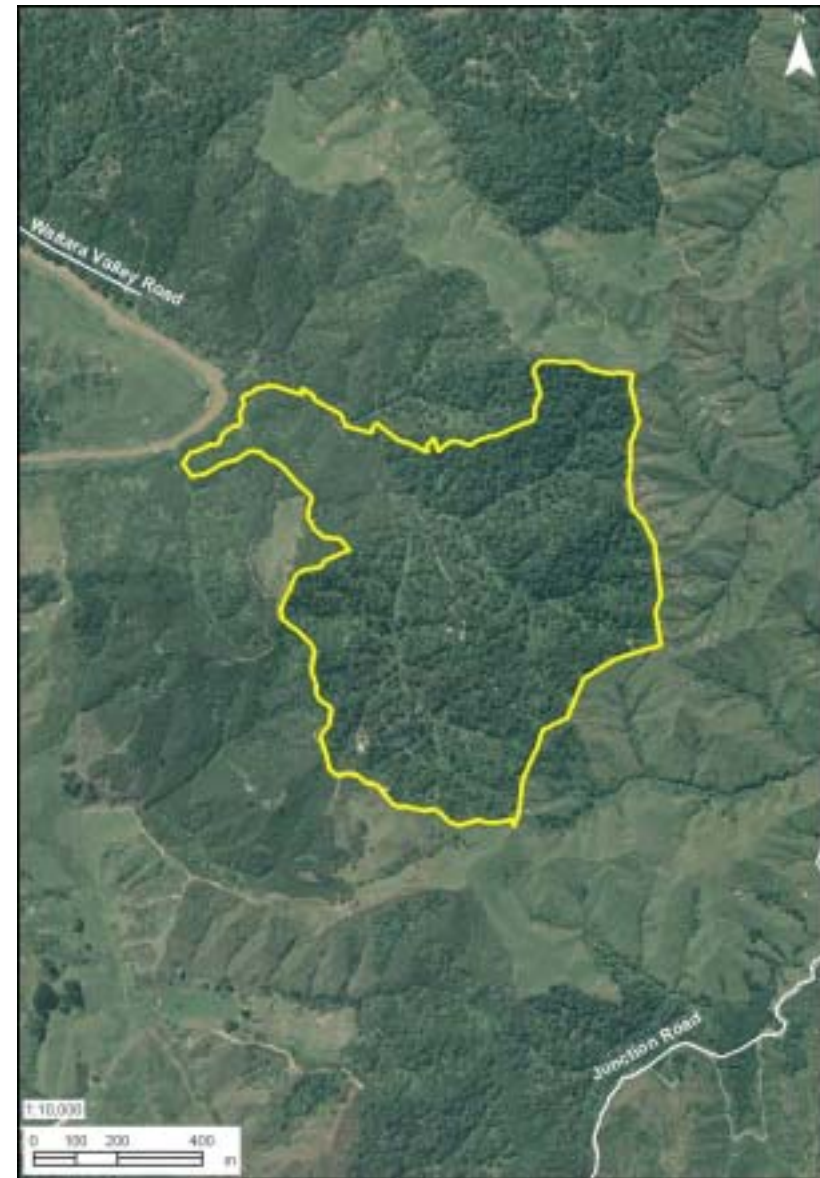
### Management threats and response

Potential and actual threats to the sustainability of the QEII Covenant 5/06/148 site's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Low	Possums, goats, cats, mustelids, and rats
Weeds	Low	
Habitat modification	Low to medium	In unfenced parts of the covenant there is some threat from grazing

Site protection measures addressing potential threats and actual threats are as follows:

Site protection	Yes/No	Description
<b>A</b> Public ownership or formal agreement	Yes	QEII Covenant covers the entire site
<b>B</b> Regulatory protection by local government	Yes	General regional or district rules might apply
<b>C</b> Active protection	Yes	The site is mostly fenced Intensive and effective pest control by landowners



## QEII Covenant 5/06/152

At a glance (last updated: February 2006)			
TRC reference:		Ecological district:	North Taranaki
Other reference:	QEII 5/06/152	LENZ environment:	F1.1b (11.2ha) F1.1d (286.3 ha) F1.3b (0.5 ha) F7.2a (35.7 ha)
Land tenure:	Private	Protection status:	A, B, C
GPS:	2644500E – 6199500N	Area:	333.7 ha

### Location

The QEII Covenant 5/06/152 site is located on privately owned land near Waitiri Road, Omoana, in eastern Taranaki. The site is within the Matemateaonga Ecological District.

### General description

The QEII Covenant 5/06/152 site covers 333.7 ha of lowland modified forest. The vegetation is typical of regenerating forest found in the eastern Taranaki area. The area had previously been cleared and farmed. The Covenant site covers a single catchment that feeds the Mangatoromiro Stream, which is a tributary of the Patea River.

The Covenant site is surrounded by other forest. An adjoining 80 ha is proposed for a QEII Covenant. Other nearby protected areas include the Tahunaware Scenic Reserve, Rauhitiroa Road Conservation Area, Waitiri Scenic Reserve, and Waitotara Conservation Area.

### Ecological features

#### Vegetation

Canopy vegetation within the Covenant area primarily consists of rewarewa (*Knightia excelsa*) – pukatea (*Laurelia novaeseelandiae*) – rata (*Metrosideros robusta*) forest. Manuka (*Leptospermum scoparium*) and kanuka (*Kunzea ericoides*) are also present.

#### Fauna

An Ornithological Society survey of the Covenant area identified 34 bird species. These included the New Zealand falcon (*Falco novaeseelandiae*), which is identified as 'Acutely Threatened (Nationally Vulnerable)'. Also present at the site are North Island brown kiwi (*Apteryx australis mantelli*), which is identified as 'Chronically Threatened (Serious Decline)' nationally.

Also present at the site are North Island robin (*Petroica australis longipes*), fantail (*Rhipidura fuliginosa*), bellbird (*Anthornis melanura*), grey warbler (*Gerygone igata*), kingfisher, pukeko (*Porphyrio porphyrio*), and New Zealand pipit (*Anthus novaeseelandiae novaeseelandiae*).

### Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Contains the 'Acutely Threatened' New Zealand falcon Also contains the 'Chronically Threatened' North Island brown kiwi
Representativeness	High	Contains indigenous vegetation on F7.2a – an 'Acutely Threatened' LENZ environment
Ecological context	High	Close to and provides connectivity to Tahunaware Scenic Reserve, Rauhitiroa Road Conservation Area, Waitiri Scenic Reserve, and Waitotara Conservation Area. There is also a proposed QEII covenant adjacent to this site Also provides core habitat for the threatened New Zealand falcon and North Island brown kiwi
Sustainability	Positive	In good vegetative condition. Large area in a circular shape. Key ecological processes still influence the site. Under appropriate management, it can remain resilient to existing or potential threats

## Management threats and response

Potential and actual threats to the sustainability of the QEII Covenant 5/06/152 site's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Medium to high	Possums, goats, cats, mustelids, and rats
Weeds	Low	
Habitat modification	Low	Low threat from grazing

Site protection measures addressing potential threats and actual threats are as follows:

Site protection	Yes/No	Description
<b>A</b> Public ownership or formal agreement	Yes	QEII Covenant covers the whole site
<b>B</b> Regulatory protection by local government	Yes	General regional or district rules might apply
<b>C</b> Active protection	Yes	The site is mostly fenced



## Rapanui (headwaters)

At a glance (last updated: February 2006)			
<b>TRC reference:</b>		<b>Ecological district:</b>	North Taranaki
<b>Other reference:</b>	NPDC SNA 4	<b>LENZ environment:</b>	F1.1b
<b>Land tenure:</b>	Private	<b>Protection status:</b>	B
<b>GPS:</b>	2653133E – 6267068N	<b>Area:</b>	92.4 ha

### Location

The Rapanui (headwaters) site is located on privately owned land, 8.5 km south-east of Mokau. The site lies in the North Taranaki Ecological District.

### General description

The Rapanui (headwaters) site is a large (92.4 ha) primary, semi coastal and lowland hillslope forest at the headwaters of the Rapanui and Mangahutiwai catchments. It bridges the gap between the coastal and semi-coastal areas of Kuwhatahi and the lowland forests of Huitiwai – together these three areas provide a continuous tract of coastal, semi-coastal and lowland indigenous vegetation types over a range of landforms.

### Ecological features

#### Vegetation

Canopy species on the drier hillslopes and ridges in the Rapanui (headwaters) site is predominantly hard beech (*Nothofagus truncata*) and tawa (*Beilschmiedia tawa*) and, to a lesser extent, rewarewa (*Knightia excelsa*), manuka (*Leptospermum scoparium*), and mamaku (*Cyathea medullaris*).

There is also some areas of regenerating bush comprising of pukatea (*Laurelia novaezelandiae*) – kahikatea (*Dacrycarpus dacrydioides*) / wheki (*Dicksonia squarrosa*)-ramarama (*Lophomyrtus bullata*)/ *Carex virgata* tussock-treeland on the alluvial terrace.

#### Fauna

Unknown. No specific indigenous fauna species have been recorded for the Rapanui (headwaters) site.

### Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	Low	Not known to contain any 'Acutely Threatened' species or species uncommon in Taranaki
Representativeness	Low	LENZ environment not threatened
Ecological context	High	Is interconnected with Kuwhatahi and Huitiwai providing a regionally unique continuous tract of coastal, semi coastal and lowland indigenous forest types over a range of landforms
Sustainability	Positive	In good vegetative condition. Key ecological processes still influence the site. Under appropriate management, it can remain resilient to existing or potential threats

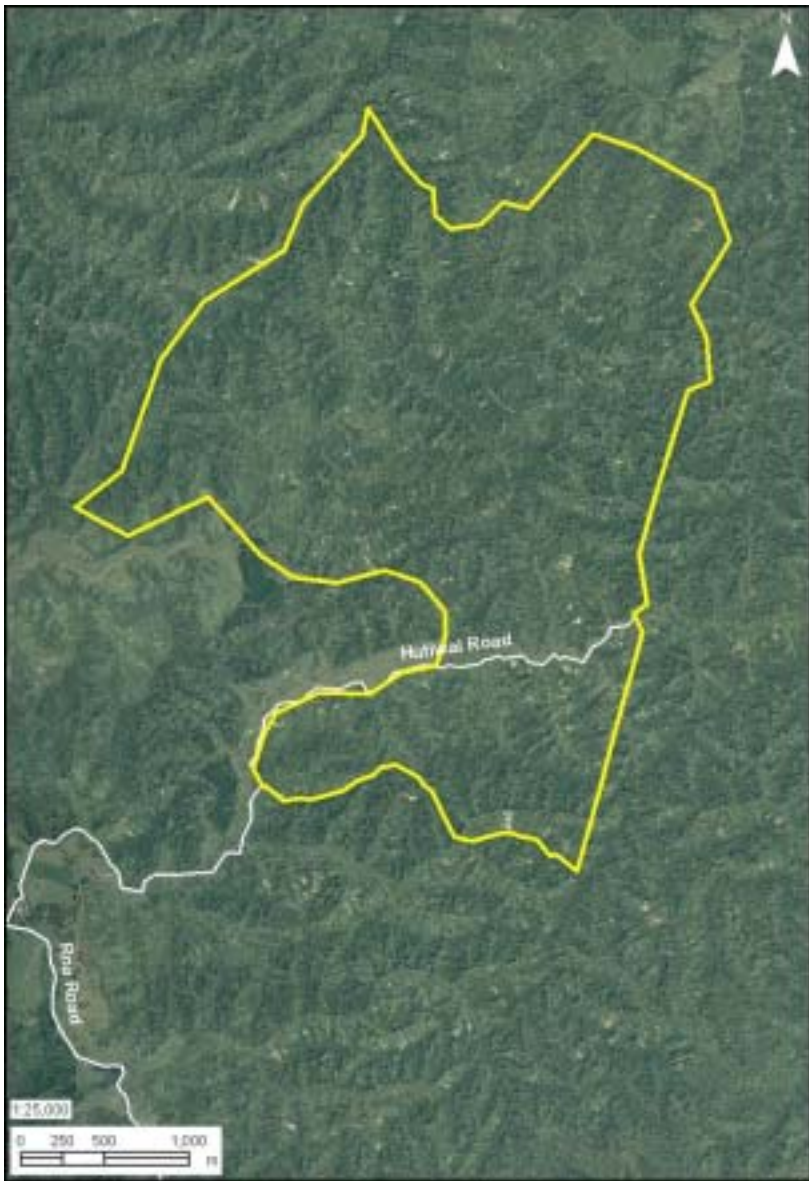
### Management threats and response

Potential and actual threats to the sustainability of Rapanui (headwaters) site's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Medium to high	Possums, goats, cats, mustelids and rats
Weeds	Low	
Habitat modification	Low	Potential effects include livestock grazing and vegetation clearance around the margins

Site protection measures addressing potential threats and actual threats are as follows:

Site protection	Yes/No	Description
<b>A</b> Public ownership or formal agreement	No	
<b>B</b> Regulatory protection by local government	Yes	Site specific rules apply – New Plymouth District Council rules for Significant Natural Areas (refer Appendix 21 of the District Plan) General regional or district rules might also apply
<b>C</b> Active protection	No	





# Rapanui Petrel Colony

At a glance (last updated: February 2006)			
TRC reference:	Ecological district:	North Taranaki	
Other reference:	LENZ environment:	C1.2a	
Land tenure:	Private	Protection status:	B, C
GPS:	2648122E – 6265692N	Area:	2.4 ha

## Location

The Rapanui Petrel Colony is located on privately owned land, approximately 70 km, north of New Plymouth and 12 km south of Mokau. The sites lie in the North Taranaki Ecological District.

## General description

The Rapanui Petrel Colony is a small (2.4 ha) coastal flaxland cliff landscape located on the southern side of the Rapanui stream mouth. Severe erosion has taken place on the coastal cliffs. Another Key Native Ecosystem – the Rapanui Wetland – is located on the northern side of the Rapanui Stream mouth.

## Ecological features

### Vegetation

Vegetation within the Petrel Colony site is predominantly secondary scrub. A number of native and exotic trees, shrubs, ferns, grass and herb species are present. Canopy species include kawakawa (*Macropiper excelsum*), karo (*Pittosporum crassifolium*), and taupata (*Coprosma repens*). These plants are all very stunted and windblown. There is no understorey present. Groundcover consists of pasture grass and flax. The native white sun orchid (*Thelymitra longifolia*) is also present.

### Fauna

The petrel colony site provides a large nesting site for the grey-faced petrel (*Pterodroma macroptera gouldi*). While the grey-faced petrel is not a threatened species, nevertheless the site is ecologically unique as it is the only large nesting site for the petrel on the mainland where once it was abundant along the Taranaki coast. Other birds present include tui (*Prosthemadera novaeseelandiae*), diving petrel (*Pelecanoides urinatrix*), and fluttering shearwater (*Puffinus gavia*).

## Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Regionally distinctive in that it is the only large nesting site of the grey-faced petrel on the mainland
Representativeness	High	Contains indigenous vegetation on C1.2c – an ‘Acutely Threatened’ LENZ environment
Ecological context	High	Provides core habitat and a large nesting site for the only mainland colony of grey-faced petrel as extension of habitat on offshore stacks
Sustainability	Positive	In fair but improving vegetative condition. Key ecological processes still influence the site. Under appropriate management, it can remain resilient to existing or potential threats

## Management threats and response

Potential and actual threats to the sustainability of Rapanui Petrel Colony’s ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Low	Possums and cats have been present in the past, but have been eradicated
Weeds	Low	Boxthorn and kikuyu grass are present
Habitat modification	Low	Predator proof fence but requires ongoing maintenance

Site protection measures addressing potential threats and actual threats are as follows:

Site protection	Yes/No	Description
A Public ownership or formal agreement	No	QEII Covenant in progress
B Regulatory protection by local government	Yes	General regional or district rules might apply
C Active protection	Yes	Predator proof fence Sustained pest control Weed control and supplementary planting



# Rapanui Wetland

## At a glance (last updated: February 2006)

<b>TRC reference:</b>	1006-0	<b>Ecological district:</b>	North Taranaki
<b>Other reference:</b>		<b>LENZ environment:</b>	F5.2a
<b>Land tenure:</b>	District council land	<b>Protection status:</b>	A, B, C
<b>GPS:</b>	2648355E – 6265977N	<b>Area:</b>	1.7 ha

## Location

The Rapanui Wetland is located approximately 70 km, north of New Plymouth and 12 km south of Mokau. The site lies in the North Taranaki Ecological District.

## General description

The Rapanui Wetland is a small (1.7 ha) palustrine wetland on the northern bank of the Rapanui Stream mouth and adjacent to State Highway 3.

The wetland lies mostly on New Plymouth District Council owned land and is designated a Recreation Reserve. Another Key Native Ecosystem – the Rapanui Petrel Colony – is located on the southern side of the Rapanui Stream mouth.



## Ecological features

### Vegetation

Vegetation within the Rapanui Wetland is predominantly raupo (*Typha orientalis*) with some flax (*Phormium tenax*).

### Fauna

The 'Acutely Threatened (Nationally Endangered)' Australasian bittern (*Botaurus poiciloptilus*) can be found at the Rapanui Wetland and probably moves between this site and the Mohakatino Swamp.

## Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Contains the 'Acutely Threatened' Australasian bittern
Representativeness	High	Contains indigenous vegetation on F5.2a – an 'Acutely Threatened' LENZ environment
Ecological context	High	Connected to petrel colony by coastal cliff vegetation and also nearby Kawanui Pa. Also provides habitat for indigenous and threatened Australasian bittern in connection with similar wetland at Mohakatino rivermouth
Sustainability	Positive	In good vegetative condition. Key ecological processes still influence the site. Under appropriate management, it can remain resilient to existing or potential threats

## Other values

Rapanui Beach and Wetland has the following additional values:

- Recreational: there is a small roadside picnic area, and a nearby sandy beach that is popular for swimming and fishing
- Cultural: pa and midden (oven) sites are present.

## Management threats and response

Potential and actual threats to the sustainability of Rapanui Wetland's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Low to medium	Possums, cats, rabbits, mustelids, hedgehogs, and rats
Weeds	Low	
Habitat modification	Medium	No stock access into the Rapanui Wetland Potential effects include clearance, road works, and free campers leaving domestic rubbish

Site protection measures addressing potential threats and actual threats are as follows:

Site protection	Yes/No	Description
<b>A</b> Public ownership or formal agreement	Yes	District Council land (Recreation Reserve)
<b>B</b> Regulatory protection by local government	Yes	Site specific rules apply – Taranaki Regional Council rules for wetlands (refer Appendix III of the Regional Fresh Water Plan) General regional or district rules might also apply
<b>C</b> Active protection	Yes	Partially fenced (with natural vegetative barriers)



# Ratapihipihi Scenic Reserve

## At a glance (last updated: February 2006)

<b>TRC reference:</b>		<b>Ecological district:</b>	Egmont
<b>Other reference:</b>	DOC 70422, LD No 58	<b>LENZ environment:</b>	F5.2b
<b>Land tenure:</b>	Crown	<b>Protection status:</b>	A, B, C
<b>GPS:</b>	2600231E – 6232966N	<b>Area:</b>	17.2 ha

### Location

The Crown owned Ratapihipihi Scenic Reserve is located 5 km south of New Plymouth. The Reserve lies in the Egmont Ecological District.

### General description

The 17.2 ha Ratapihipihi Scenic Reserve is administered by the Department of Conservation. The Reserve is a remnant of semi-coastal forest. The forest is predominantly on the east side of a gully with a large stream and associated tributaries flowing through the bottom.

### Ecological features

#### Vegetation

Ratapihipihi Scenic Reserve is primarily covered by tawa (*Beilschmiedia tawa*) – pukatea (*Laurelia novaezelandiae*)/kohekohe (*Dysoxylum spectabile*) forest. Tawa up to 20 metres high is the principal canopy component with pukatea common close to streams and in areas of impeded drainage.

Although there was some extraction of rimu (*Dacrycarpus dacrydioides*), miro (*Prumnopitys ferruginea*), rata (*Metrosideros robusta*) and puriri (*Vitex lucens*) in the late 1850s some large individuals of rimu and puriri remain.

The understorey is dominated by kohekohe (*Dysoxylum spectabile*), mahoe (*Melicytus ramiflorus*), pigeonwood (*Hedycarya arborea*), kawakawa (*Macropiper excelsum*), nikau (*Rhopalostylis sapida*), and tree ferns.

Some 'natives' trees have also been planted in the Reserve including species not natural to the area including kauri (*Agathis australis*), silver beech (*Nothofagus menzeisii*), tanekaha (*Phyllocladus trichomanoides*), *Olearia paniculata*, *Hoheria populnea*, and ribbonwood (*Plagianthus betulinus*).

### Fauna

Unknown. No specific indigenous fauna species have been recorded for the Ratapihipihi Scenic Reserve.

### Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	Low	Not known to contain any 'Acutely Threatened' species' or species uncommon in Taranaki
Representativeness	High	Contains indigenous vegetation on F5.2b – an 'Acutely Threatened' LENZ environment
Ecological context	Medium	Connected to other small forest fragments by gully systems, riparian vegetation
Sustainability	Positive	Key ecological processes still influence the site. Management required of existing (weeds) and potential threats. However, under appropriate management, it can remain resilient to existing or potential threats

### Other values

Ratapihipihi Scenic Reserve has walking tracks popular for public recreation.

### Management threats and response

Potential and actual threats to the sustainability of Ratapihipihi's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Low – medium	Possums, cats, mustelids, and rats
Weeds	Medium	Wandering willy on stream banks, <i>Asparagus scandens</i> , selaginella
Habitat modification	Low to medium	Past extraction of trees, construction and maintenance of walking tracks. There are also planted 'native' vegetation, which is not natural to this area

Site protection measures addressing potential threats and actual threats are as follows:

Site protection	Yes/No	Description
A	Yes	Public Conservation Estate (Scenic Reserve)
B	Yes	General regional or district rules might apply
C	Yes	Department of Conservation possum control programme



## Rerekino Conservation Area

At a glance (last updated: February 2006)			
<b>TRC reference:</b>		<b>Ecological district:</b>	North Taranaki
<b>Other reference:</b>	DOC 70302	<b>LENZ environment:</b>	F1.1b (289.6 ha) F1.1d (229.1 ha) F7.2a (1.8 ha)
<b>Land tenure:</b>	Crown	<b>Protection status:</b>	A, B
<b>GPS:</b>	2651091E – 6241458N	<b>Area:</b>	520.7 ha

### Location

The Crown owned Rerekino Conservation Area is located 2.1 km east of Urenui. The Reserve lies in the North Taranaki Ecological District.

### General description

The Rerekino Conservation Area is a large (520.7 ha) riparian strip of mainly primary forest. The Reserve, which is administered by the Department of Conservation, lies on the western bank of the south flowing middle reaches of the Waitara River.

### Ecological features

#### Vegetation

The Rerekino Conservation Area primarily comprises of tawa (*Beilschmiedia tawa*)-kamahi (*Weinmannia racemosa*)-hinau (*Elaeocarpus dentatus*) forest, with an exceptionally high stocking of rimu (*Dacrycarpus dacrydioides*). Miro (*Prumnopitys ferruginea*) and thin-barked totara (*Podocarpus hallii*) are common on ridges and rimu is a frequent emergent of the small enclaves of alluvial terrace forest adjoining the Waitara River.

#### Fauna

Unknown. No specific indigenous fauna species have been recorded for the Rerekino Conservation Area.

### Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Regionally uncommon alluvial terrace forest with high stocking rate of rimu
Representativeness	Medium	Contains indigenous vegetation on F7.2a – an 'At Risk' LENZ environment (F7.2a)
Ecological context	Medium	Adjoins Waitara River and close to other large forest remnants
Sustainability	Positive	Self sustaining forest. Key ecological processes still influence the site. Under appropriate management, it can remain resilient to existing or potential threats

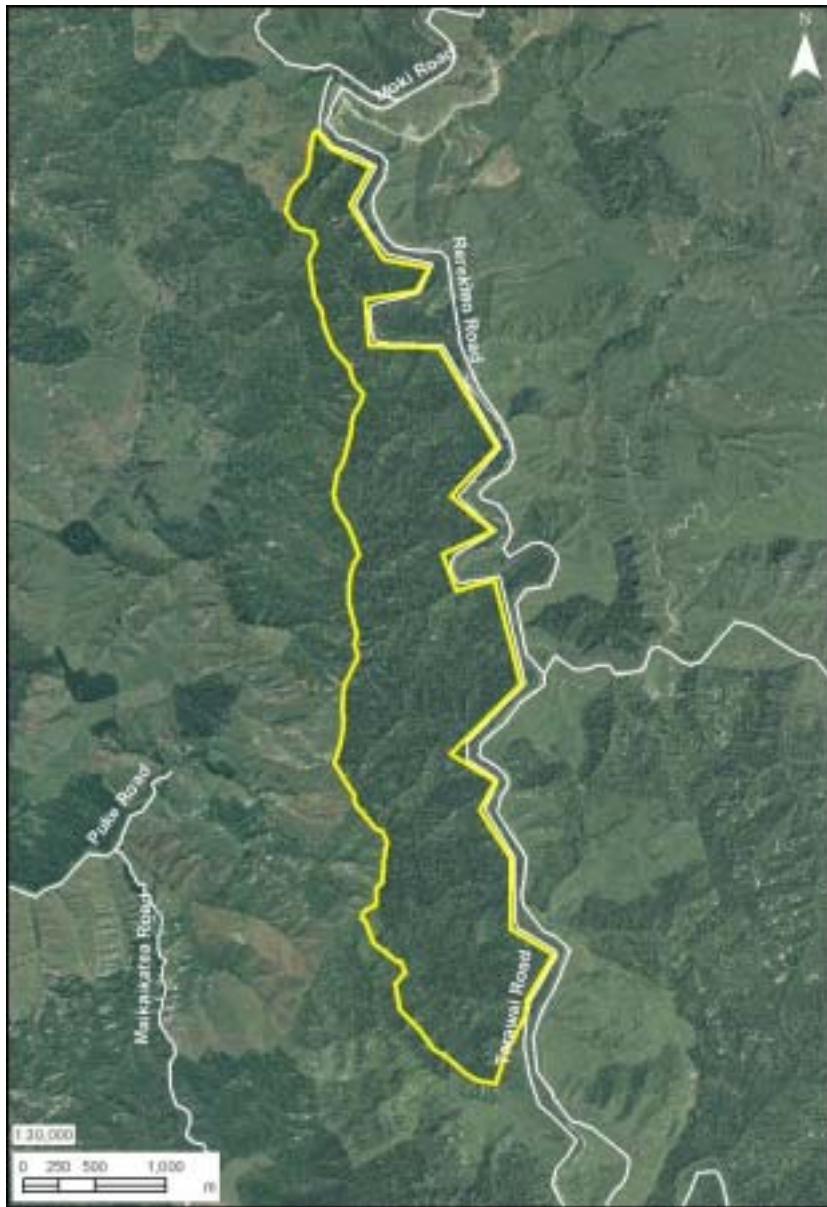
### Management threats and response

Potential and actual threats to the sustainability of Rerekino Conservation Area's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Medium	Possums, goats, cats, mustelids, and rats
Weeds	Low	
Habitat modification	Medium	Cattle grazing in margins

Site protection measures addressing potential threats and actual threats are as follows:

Site protection	Yes/No	Description
<b>A</b> Public ownership or formal agreement	Yes	Conservation Area administered by the Department of Conservation
<b>B</b> Regulatory protection by local government	Yes	General regional or district rules might apply
<b>C</b> Active protection	No	





## Rotokohu Wetland (Scenic Reserve)

At a glance (last updated: February 2006)			
TRC reference:	0901-0	Ecological district:	Matemateaonga
Other reference:	STDC SNA 25 DOC 70284	LENZ environment:	H3.1b
Land tenure:	Crown	Protection status:	A, B, C
GPS:	2663456E – 6186272N	Area:	29.5 ha

### Location

The Crown-owned Rotokohu Wetland (Scenic Reserve) is located 30 km north-east of Waverley. It lies in the Matemateaonga Ecological District.

### General description

The Rotokohu Wetland (Scenic Reserve) lies predominantly in the Rotokohu Scenic Reserve with the remainder being in the Waitotara Conservation Area. Both areas are administered by the Department of Conservation. The wetland is 29.6 ha in size and is part of the best remaining 'drowned floodplain' wetland type in the Matemateaonga Ecological District.

Part of the wetland includes swampy alluvial deposits on the western side of Pokeka Stream and adjoins the Rotokohu Wetlands. This area is commonly called Lake Hawkes Reserve, and contains steep bluffs and gorges. The lake is formed by a large landslide and contains an impressive waterfall. The eastern boundary of the Rotokohu Scenic Reserve adjoins the Rotokohu Wetland and Catchment. While the western boundary adjoins and in some places is part of the Waitotara Conservation Area.

### Ecological features

#### Vegetation

The main vegetation types include: *Carex – Juncus – Cyperus* tussockland, sedges including purei/makura (*Carex secta*), *Carex virgata*, *Juncus gregiflorus*, soft rush (*Juncus effusus*), and giant umbrella sedge (*Cyperus ustulatus*). The Rotokohu Scenic Reserve also contains mountain neinei (*Dracophyllum traversii*) and is the southern most location for this plant.

#### Fauna

The 'At Risk (Sparse)' fernbird (*Bowdleria punctata vealeae*) and spotless

crake (*Porzana tabuensis plumbea*), are present. The fernbird and spotless crake are particularly uncommon in the region.

### Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Regionally distinctive in that the site is the southern most recorded location of mountain neinei and through the presence of the 'At Risk' fernbird and spotless crake, which are particularly uncommon in the region
Representativeness	High	Contains indigenous vegetation on H3.1b – an 'Acutely Threatened' LENZ environment
Ecological context	High	Best representative example of a natural floodplain in the Matemateaonga Ecological District. The site is interconnected with the ecosystems of the Rotokohu Wetland and Catchment area and the nearby Pokeke Stream, lakes and the forest  Also provides core habitat for the threatened fernbird and spotless crake
Sustainability	Positive	In good vegetative condition. Key ecological processes still influence the site. Under appropriate management, it can remain resilient to existing or potential threats

### Other values

Rotokohu Scenic Reserve also has recreational value. The area has scenic value, being a mosaic of pools, stream and reed beds, and is traversed by a popular tramping track to the Waitotara Conservation Area.

### Management threats and response

Potential and actual threats to the sustainability of the Rotokohu Wetland (Scenic Reserve)'s ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Medium to high	Possums, cats, goats, fallow deer, pigs, rabbits, mustelids, hedgehogs, and rats
Weeds	Low	
Habitat modification	Medium to high	Unfenced – grazing by cattle is a problem. Reserve suffered severe sediment deposition following the 2004 flood event

Site protection measures addressing potential threats and actual threats are as follows:

Site protection	Yes/No	Description
A	Yes	Public Conservation Estate (Scenic Reserve)
B	Yes	Site specific rules apply – Taranaki Regional Council rules for wetlands (refer Appendix IIA of the Regional Fresh Water Plan) – South Taranaki District Council rules for Significant Natural Areas (refer Schedule II of the District Plan) General regional or district rules might also apply
C	Yes	Partially fenced



## Rotokohu Wetland and catchment

At a glance (last updated: February 2006)			
TRC reference:	0938-0	Ecological district:	Matemateaonga
Other reference:	STDC SNA 25 SSBI R21/H022 PNA 41	LENZ environment:	F1.1d (28.5 ha) F1.1e (0.3 ha) F1.3b (27.6 ha) F5.2a (0.2 ha) F5.2c (1.3 ha) F7.2a (1.3 ha) H3.1 b (27.6 ha)
		Protection status:	B
GPS:	2663500E – 6186000N	Area:	86.9 ha

### Location

The Rotokohu Wetland and catchment is located on privately owned land, 30 km north-east of Waverley. It lies in the Matemateaonga Ecological District.

### General description

The Rotokohu Wetland and catchment covers 86.9 ha and lies along the Pokaka Stream, 2 km above its confluence with the Waitotara River. A slump to the south of the site has impeded drainage of the stream. The area consists of Lake Rotokohu itself, two smaller lakes and at least two more temporary ponds, as well as periodically submerged floodplain and hill country forest. The stream carries a high silt load following heavy rain and this area receives frequent depositions of silt. The area represents the best representative example of a natural floodplain in the Ecological District.

The western boundary of the Rotokohu site adjoins the Rotokohu Scenic Reserve and Waitotara Conservation Area.

### Ecological features

#### Vegetation

The area contains sedgeland and rush vegetation. An adjoining area of tawa (*Beilschmiedia tawa*) and black beech (*Nothofagus solandri* var. *solandri*) forest provides important buffering to the wetland. Several sedge species dominate the vegetation on the floodplain - rautahi (*Carex geminata*) and

giant umbrella sedge (*Cyperus ustulatus*) are the most common. The rushes *Juncus gregiflorus* and *J. effusus* are also widespread. Other sedges include swamp sedge (*Carex virgata*), *C. dissita*, *Carex lessoniana*, sharp spike sedge (*Eleocharis acuta*), and *Isolepis distigmatosa*. *Carex secta* and *Bolboschoenus fluviatilis* are also locally common and there are stands of *Schoenoplectus validus* in the lakes.

Under the sedges a range of herbs are present, including species of buttercup, watercress, water forget-me-not, willow herbs, and bachelor's button. Several small weeds, including jointed rush (*Juncus articulatus*), are present as ground cover. The main lake has a fringe of raupo (*Typha orientalis*).

In other parts of the wetland taller species dominate, though the sedge and rush association still persists. Toetoe marks the boundary between the two different vegetation types. The taller species include round-leaved coprosma (*Coprosma rotundifolia*), ramarama (*Lophomyrtus bullata*), mahoe (*Melicytus ramiflorus*), wineberry (*Aristotelia serrata*), kahikatea (*Dacrycarpus dacrydiodes*), and pukatea (*Laurelia novaezelandiae*).

#### Fauna

The Rotokohu Wetland and catchment contain the 'At Risk (Sparse)' fernbird (*Bowdleria punctata vealeae*) and spotless crane (*Porzana tabuensis plumbea*), which are particularly uncommon in Taranaki.

### Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Contains the 'At Risk' fernbird and spotless crane, which are particularly uncommon in Taranaki
Representativeness	High	Contains indigenous vegetation on 'Acutely Threatened' (F5.2a, F5.2c, H3.1b), 'Chronically Threatened' (F1.1e) and 'At Risk' (F7.2a) LENZ environments
Ecological context	High	Best representative example of a natural floodplain in the Matemateaonga Ecological District. The site is interconnected with the ecosystems of the Rotokohu Scenic Reserve, Pokeke Stream, lakes and the forest on the adjacent slopes  Provides core habitat for the threatened and regionally uncommon fernbird and spotless crane
Sustainability	Positive	In good vegetative condition. Key ecological processes still influence the site. Under appropriate management, it can remain resilient to existing or potential threats

## Other values

The Rotokohu Wetland and catchment also has recreational value. The area has scenic value, being a mosaic of pools, stream and reed beds, and is traversed by a popular tramping track to the Waitotara Conservation Area.

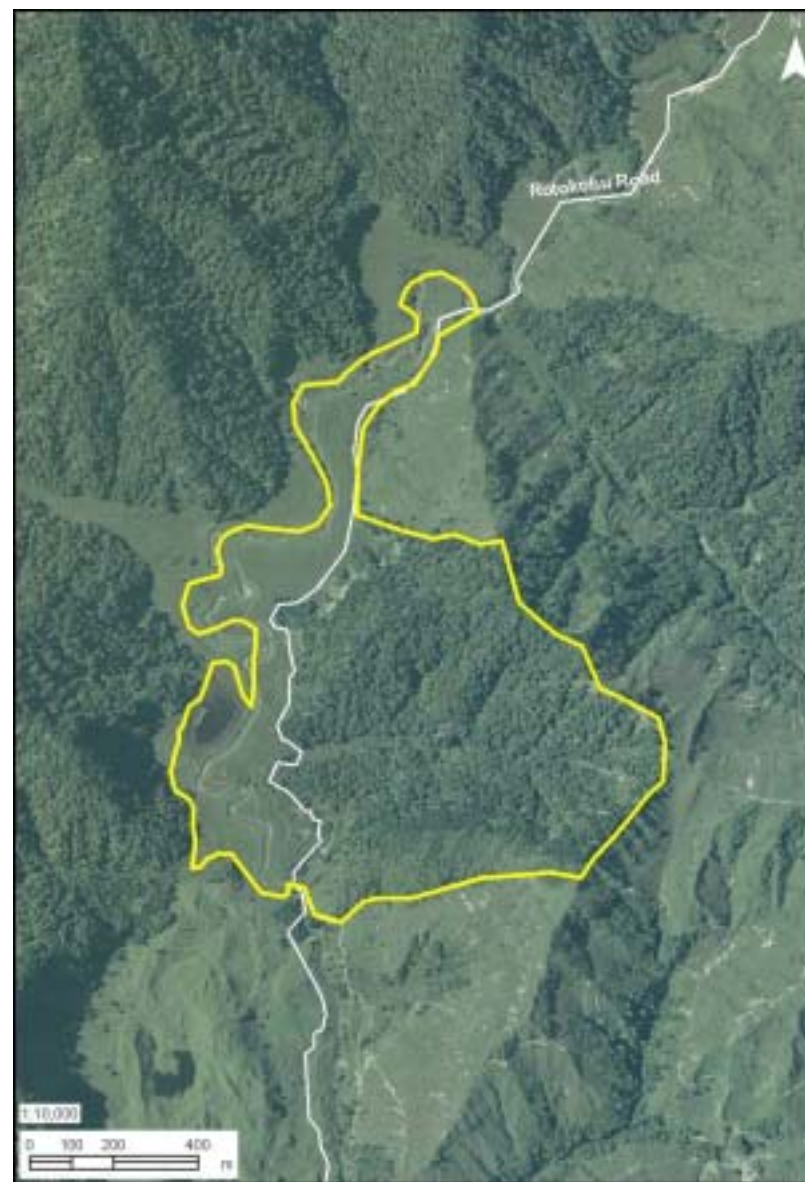
## Management threats and response

Potential and actual threats to the sustainability of the Rotokohu Wetland and catchment's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Medium to high	Possums, cats, goats, fallow deer, pigs, mustelids, hedgehogs, and rats
Weeds	Medium	Willows, pampas grass, and jointed rushes
Habitat modification	Medium to high	Unfenced – grazing by cattle stock is a problem. Wetlands suffered severe sediment deposition following the 2004 flood event

Site protection measures addressing potential threats and actual threats are as follows:

Site protection	Yes/No	Description
<b>A</b> Public ownership or formal agreement	No	
<b>B</b> Regulatory protection by local government	Yes	Site specific rules apply <ul style="list-style-type: none"> <li>– Taranaki Regional Council rules for wetlands (refer Appendix IIB of the Regional Fresh Water Plan)</li> <li>– South Taranaki District Council rules for Significant Natural Areas (refer Schedule II of the District Plan)</li> </ul> General regional or district rules might also apply
<b>C</b> Active protection	No	



## Rowan Road

### At a glance (last updated: February 2006)

<b>TRC reference:</b>	<b>Ecological district:</b>	Egmont
<b>Other reference:</b>	STDC SNA 9	<b>LENZ environment:</b>
		C1.3a
<b>Land tenure:</b>	Private	<b>Protection status:</b>
		B, C
<b>GPS:</b>	2606900E – 6194600N	<b>Area:</b>
		2.7 ha

### Location

The Rowan Road site is located on privately owned land, 3 km south-west of Kaponga. It lies in the Egmont Ecological District.

### General description

The Rowan Road lowland forest remnant covers approximately 2.7 ha and lies between an unnamed tributary of Little Dunn's Creek and Dunn's Creek. The canopy of this site is wind damaged, and there is no undergrowth due to extensive past grazing. However, the site has been identified as the best remaining forest remnant in the Opunake Formation.

### Ecological features

#### Vegetation

The forest canopy consists of mainly tawa (*Beilschmiedia tawa*), with some mahoe (*Melicactus ramiflorus*) and pukatea (*Laurelia novaezelandiae*).

#### Fauna

Unknown. No specific indigenous fauna species have been recorded for Rowan Road.

### Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	Low	Not known to contain any 'Acutely Threatened' species, or species uncommon in Taranaki
Representativeness	High	Contains indigenous vegetation on C1.3a – an 'Acutely Threatened' LENZ environment. Identified as the best remaining forest remnant in the Opunake Formation. Indigenous vegetation of any type on this landform is now rare
Ecological context	Low	Very few small forest/riparian remnants in vicinity
Sustainability	Positive	In relatively poor vegetative condition due to wind damage and extensive past grazing. However, key ecological processes still influence the site. Under appropriate management, it could recover and remain resilient to existing or potential threats

### Management threats and response

Potential and actual threats to the sustainability of the Rowan Road wetland's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Low to medium	Possums, cats, mustelids, and rats
Weeds	Low	Pasture grasses
Habitat modification	High	There is no undergrowth due to extensive past grazing

Site protection measures addressing potential threats and actual threats are as follows:

Site protection	Yes/No	Description
<b>A</b>	Public ownership or formal agreement	No
<b>B</b>	Regulatory protection by local government	Yes Site specific rules apply – South Taranaki District Council rules for Significant Natural Areas (refer Schedule II of the District Plan) General regional or district rules might also apply
<b>C</b>	Active protection	Yes Self-help Possum Control Programme

