## **Alfred Road Wetland**

At a glance (last updated: February 2006)				
TRC reference:	0918-0	Ecological district:	Egmont	
Other reference:	NPDC SNA No. 23	LENZ environment:	F5.3 (4.1 ha)	
			H1.3b (153.3 ha)	
Land tenure:	Private	Protection status:	B, C	
GPS:	2605882E - 6221158N	Area:	157.4 ha	

### Location

The Alfred Road wetland is located on privately owned land approximately 8 km south west of Inglewood. It lies in the Egmont Ecological District.

### **General description**

The Alfred Road forest remnant is 157.4 ha in size and lies between the Waiwhakaiho River and the Kaiaua Stream in north Taranaki. It comprises of lowland forest that lies on flood deposits of alluvial gravel and sand (known as the Hangatahua Gravels) and which was previously logged. The forest canopy has now recovered and is up to 20 metres in height. The wetland forest is contiguous with indigenous forest in the adjacent Egmont National Park extending over an altitudinal range of about 380-450 metres above sea level.

### **Ecological features**

#### Vegetation

The Alfred Road forest remnant is a kamahi (*Weinmannia racemosa*) dominant lowland forest. The stature of kamahi varies dramatically and in places there are very large spreading trees, 16 metres tall, with large trunks and branches with epiphytes. Other trees present, but at scattered low density, include rimu (*Dacrydium cupressinum*), mountain tree daisy (*Olearia arborescens*), and thin-barked totara (*Podocarpus hallii*). Hinau (*Elaeocarpus dentatus*), and miro (*Prumnopitys ferruginea*) are also present in the canopy. The understorey commonly comprises pigeonwood (*Hedycarya arborea*) and *Cyathea smithii* with locally abundant kareao/supplejack (*Ripogonum scandens*). Hen and chicken fern (*Asplenium bulbiferum*) is found in damp parts of the ground cover. Tawa (*Beilschmiedia tawa*) forest is also present, with a canopy of c.20 metres tall and an understory of kareao, and tawa saplings over a groundcover of crown fern (*Blechnum discolor*), and hooked sedge (*Uncinia uncinata*). Raukaua (*Raukaua edgerleyi*), which is identified as 'Chronically Threatened (Gradual decline)' in New Zealand, is also present.

Small patches of kahikatea (*Dacrycarpus dacrydioides*) forest are also present. There is at least one reasonably large area of very good quality swamp maire forest. This type of wetland forest once covered at least 20,000 hectare of the Egmont Ecological Region – it now covers less than 2% of its former extent. Swamp maire is a species that is adapted to swampy conditions, with pneumatophores (breathing roots). Trees may be 16 metres tall and up to 0.5 metres in diameter. Swamp coprosma (*Coprosma tenuicaulis*) and kiekie (*Freycinetia baueriana* subsp. *banksii*) are common.

#### Fauna

The Alfred Road forest remnant provides habitat for a variety of native birds, which are present in large numbers. New Zealand pigeon (*Hemiphaga novaeseelandiae*), which is identified as being in 'Gradual Decline' in New Zealand, is also present in the area.

### **Ecological values**

Ecological values	Rank	Comment	
Rarity and distinctiveness	Medium	Contains 'Chronically Threatened' New Zealand pigeon and Raukaua	
Representativeness	High	High quality example of ecosytem H1.3b that is underprotected. Wetland forest – regionally rare wetland type covering <10% of its former extent	
Ecological context	Medium	Relatively large area contiguous with Egmont National Park (another site with significant indigenous biodiversity values). It provides a buffer and enhances the ecological values of the National Park	
Sustainability	Positive	In relatively good vegetative condition. Key ecological processes still influence the site and, 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 Alfred Road forest remnant's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Low to medium	Possums, rats and goats are present at low to medium densities and are a particular threat to <i>Raukaua edgerleyi</i> seedlings
Weeds	Low	
Habitat modification	Moderate	The site is unfenced. Grazing by wandering livestock causes damage to the understorey and seedlings, particularly around the margins

Site	Site protection		Description
Α	Public ownership or formal agreement	No	
В	Regulatory protection by local government	Yes	<ul> <li>Site specific rules apply</li> <li>Taranaki Regional Council rules for wetlands (refer Appendix IIB of the Regional Fresh Water Plan)</li> <li>New Plymouth District Council rules for Significant Natural Areas (refer Appendix 2I of the District Plan)</li> <li>General regional or district rules might also apply</li> </ul>
С	Active protection	Yes	Self-help Possum Control Programme



## **Ararata Road Wetland**

At a glance (last updated: February 2006)				
TRC reference:	1009-0	Ecological district:	Egmont	
Other reference:	STDC SNA 17	LENZ environment:	F5.2c (0.5 ha)	
			F1.3b (0.2 ha)	
Land tenure:	Private	Protection status:	A, B, C	
GPS:	2628140E - 6189960N	Area:	0.7 ha	

### Location

The Ararata Road Wetland is located on privately owned land, approximately 9 km south-east of Eltham. The wetland is within the Egmont Ecological District.

### **General description**

The Ararata Road Wetland is the remnant of a man-made lake (established by damming the gully in the 1920s) located at the bottom of a gully. The lake was once used as a swimming hole by local residents in the area but very little open water remains as the lake has in-filled through sedimentation.

## **Ecological features**

### Vegetation

Vegetation within the Ararata Road wetland is predominantly raupo (*Typha orientalis*) with some willow (*Salix* sp.). Occasional sedges (*Carex* species) and flax (*Phormium tenax*) are found around the edge.

### Fauna

The wetlands contains spotless crake (*Porsana tabuensis plumbea*), which is identified as being 'At Risk (Sparse)' and is particularly uncommon in Taranaki. Very large numbers of pukeko (*Porphyrio porphyrio*) are also present.

## **Ecological values**

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Regional distinctive in that it contains the 'At Risk' spotless crake, which is particularly uncommon in Taranaki
Representativeness	High	Contains indigenous vegetation on F5.2c – an 'Acutely Threatened' LENZ environment
Ecological context	Medium	Provides core habitat for indigenous fauna, including the at risk spotless crake
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 the Ararata Road 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	Willow
Habitat modification	Low	Wetland fenced – no stock access

Site	Site protection		Description
A	Public ownership or formal agreement	Yes	Taranaki Regional Council Memorandum of Encumbrance covering the whole site
В	Regulatory protection by local government	Yes	<ul> <li>Site specific rules apply</li> <li>Taranaki Regional Council rules for wetlands (refer Appendix III 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> <li>General regional or district rules might also apply</li> </ul>
С	Active protection	Yes	Taranaki Regional Council Conservation Plan prepared Willow control, enhancement planting Site completely fenced



## Arawhata Road Beach

At a glance (last updated: February 2006)				
TRC reference:		Ecological district:	Egmont	
Other reference:		LENZ environment:	F5.2c	
Land tenure:	Crown, district and private	Protection status:	A, B, C	
GPS:	2579108E - 6198116N	Area:	3.9 ha	

### Location

The Arawhata Road Beach site lies predominantly on Crown and district owned land, 6 km north of Opunake. The site is within the Egmont Ecological District.

### **General description**

Arawhata Road Beach is 3.2 ha in area and comprises of a low lying coastal area and a small herbfield. The foreshore is Crown owned and administered by the Department of Conservation. Extending from the foreshore is the Arawhata Local Purpose Reserve, which is administered by the South Taranaki District Council.

### **Ecological features**

#### Vegetation

Vegetation includes *Crassula manaia*, which is endemic to the Egmont – Waverley coast and is identified as 'Chronically Threatened (Gradual Decline)' nationally. Pygmy forget-me-not (*Myosotis pygmaea var. pygmaea*) is also present. 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 'Chronically Threatened (Serious Decline)' nationally.

#### Fauna

Arawhata Road Beach is one of four 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.

The 'Acutely Threatened (Nationally Vulnerable)' reef heron (*Egretta sacra sacra*) and the variable oyster catcher (*Haematopus unicolor*) are also present at the Beach.

### **Ecological values**

Ecological values	Rank	Comment	
Rarity and distinctiveness	High	Contains the 'Acutely Threatened' reef heron and variable oyster catcher.	
		Distinctive in that it contains the 'Chronically Threatened' and regionally rare pygmy forget-me-not ( <i>Myosotis pygmaea</i> var. <i>pygmaea</i> ) and the regionally endemic <i>Crassula manaia</i> . It also contains the moth Notoreas 'Taranaki', 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 f and fauna species	
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**

Arawhata Road Beach has recreational values, in particular it is a popular area for surfing and there is low to moderate use for fishing and gathering of kaimoana.

### Management threats and response

Potential and actual threats to the sustainability of Arawhata Road Beach'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 predestrian traffic Coastal erosion Grazing

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



## Awahou Scenic Reserve (in part)

At a glance	At a glance (last updated: February 2006)			
TRC reference:	0894-0	Ecological district:	North Taranaki	
Other reference:	DOC 70467	LENZ environment:	F1.1d (248.0 ha)	
			F7.2a (23.5 ha)	
Land tenure:	Crown	Protection status:	A, B, C	
GPS:	2655966E - 6226612N	Area:	271.5 ha	

### Location

The Crown owned Awahou Scenic Reserve is located 40km north-east of Stratford and lies within the North Taranaki Ecological District. Only part of the Reserve lies within the Taranaki region and is shown in the aerial photograph.

### **General description**

The Awahou Scenic Reserve is a relatively large forested area administered by the Department of Conservation. That part of the Reserve that lies in the Taranaki region is 271.5 ha in size. It lies near the Whangamomona Saddle and supports a high diversity of habitats. A 9.9 hectare riverine wetland covers the valley bottom terrace of the Awahou Stream and its tributaries, with tawa foest and black beech forest on the steeply dissected surrounding hill country. The total size of the Reserve is 447.2 ha.

### **Ecological features**

#### Vegetation

The Awahou Reserve contains a range of vegetation types including tawa (*Beilschmiedia tawa*) on the slopes, black beech forest (*Nothogagus solandri*) on the ridges and wetland (9.9 ha) in the gully bottom. Occasional hard beech is present. This reserve is near the southern limit for hard beech and the northern limit for black beech. Hybrids have been recorded at the nearby Tangarakau Gorge and are likely to occur here.

Vegetation in the wetland includes toetoe (*Cortaderia fulvida*), raupo (*Typha orientalis*), sedge tussockland, and a number of sedges such as *Carex secta*, *Carex geminata*, *Carex virgata*, and native rushes (*Juncus spp.*). Floating pondweed (*Potamogeton cheesemanii*) is found in some open pools of water.

#### Fauna

The Awahou Reserve is home to North Island brown kiwi (*Apteryx mantelli*), which is identified as 'Chonically Threatened (Serious Decline)'. The 'Acutely Threathened (Nationally Endangered)' matuku/Australasian bittern (*Botaurus poiciloptilus*) and the fernbird (*Bowdleria punctata vealeae*) and spotless crake (*Porzana tabuensis plumbea*), which are both identified as 'At Risk (Sparse)', are also likely to be present. Spotless crake are particularly uncommon in Taranaki.

Short jawed kokopu (*Galaxias postvectis*), which is identified as being 'At Risk (Sparse)' are present in the Awahou Stream and there are unconfirmed reports of the 'Acutely Threatened (Nationally Vulnerable)' North Island long-tailed bat (*Chalinolobus tuberculata*) in the area.

### **Ecological values**

Ecological values	Rank	Comment	
Rarity and distinctiveness	High	Contains the 'At Risk' and regionally uncommon spotless crake. Suspected but unconfirmed presence of the 'Acutely Threatened' North Island long-tailed bat	
		Also'contains the Chronically Threatened' North Island brown kiwi and 'At Risk' short jawed kokopu	
Representativeness	Medium	Contains indigenous vegetation on F7.2a – an 'At Risk' LENZ environment	
Ecological context	High	Vegetation sequences and located close to other areas of indigenous vegetation including wetlands	
Sustainability	Positive	The reserve is of high quality and in very 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 Awahou Scenic Reserve also has recreational value. There is a picnic area on the Whangamomona Saddle, next to State Highway 43, with a walking track through the reserve (Awahou Track).

**Management threats and response** Potential and actual threats to the sustainability of the Awahou Scenic Reserve's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Low to medium	Possums, pigs, goats, hedgehogs, cats and, rats
Weeds	Low	Gorse, buddleia and Himilayan honeysuckle on road frontage
Habitat modification	Low	

Site	protection	Yes/No	Description
Α	Public ownership or formal agreement	Yes	Public Conservation Estate (Scenic Reserve)
В	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
С	Active protection	Yes	Possum control



# **Barraclough Opua**

At a glance	At a glance (last updated: February 2006)				
TRC reference:		Ecological district:	Egmont		
Other reference:	DOC 77011	LENZ environment:	C1.3a (3.7 ha)		
			H1 <b>.</b> 3a (1.4 ha)		
			F5.2a (1.4 ha)		
Land tenure:	Private	Protection status:	В		
GPS:	258918E - 6200470	Area:	6.5 ha		

### Location

The Barraclough Opua remnants are located on privately owned land but are protected by a Conservation Covenant with the Department of Conservation. The remnants lie 7 km north-east of Opunake and are in the Egmont Ecological District.

### **General description**

Barraclough Opua comprises of two remnants (6.5 ha) of semi-coastal tawa forest on debris flows on the western side of the Egmont Ring Plain. Much of this type of forest is under protected in the Egmont Ecological District.

## **Ecological features**

#### Vegetation

The forest canopy is dominated by tawa (*Beilschmedia tawa*) with associates of pukatea (*Laurelia novaezelandiae*) and kahikatea (*Dacrycarpus dacrydioides*). Debris flow material has uneven drainage and the vegetation pattern reflects the drainage – pukatea and kahikatea are more common in the wetter areas while tawa is more common in drier areas.

#### Fauna

Unknown. No specific indigenous fauna species have been recorded for Barraclough Opua.

### **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' LENZ environments – C1.3a, H1.3a and F5.2a
Ecological context	Medium	Connected to other small remnants in the area by native vegetation on riparian margins
Sustainability	Positive	Small areas so edge effects have an impact but 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 Barraclough Opua ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Medium - Iow	Possums, cats, mustelids, and rats
Weeds	Low	
Habitat modification	Medium	Edge effects have impacted on these small remnants

Site protection		Yes/No	Description
A	Public ownership or formal agreement	Yes	Conservation covenant with the Department of Conservation
В	Regulatory protection by local government	Yes	General regional or district rules might apply
С	Active protection	Yes	Self-help Possum Control Programme



## **Barrett Lake Scenic Reserve**

At a glance	At a glance (last updated: February 2006)				
TRC reference:	0878-0	Ecological district:	Egmont		
Other reference:		LENZ environment:	F5.2b		
Land tenure:	Crown owned, administered by NPDC	Protection status:	A, B, C		
GPS:	260081E - 6234370N	Area:	7.0 ha		

### Location

The Barrett Lake Scenic Reserve wetland is located on Crown-owned land on the outskirts of New Plymouth, near Omata. The site is within the Egmont Ecological District.

### **General description**

Barrett Lake Scenic Reserve (7.0 ha) contains a small lake with a fringe of wetland vegetation species. The site is significant as a representative habitat. Similar lakes were characteristic of the landscape around New Plymouth prior to European settlement, but have since been drained. The wetland is a popular recreation area.



### **Ecological features**

#### Vegetation

The vegetation in the Barrett Lake Scenic Reserve comprises predominantly pukatea-tawa/ kohekohe forest (*Dysoxylum spectabile*).

Other vegetation present includes bamboo spike-sedge (*Eleocharis sphacelata*), raupo (*Typha orientalis*), kapungawha/lake clubrush (*Scirpus lacutris*), flax (*Phormium texax*), manihi/red pondweed (*Potamogeton*)

*cheesemanii*), water milfoil (*Myriophyllum propinquum*), and maru/burr reed (*Sparganium subglobosum*).

#### Fauna

Barrett Lake Scenic Reserve provides a valuable water bird habitat. The Reserve is an important link for birds between the coast and the land. It is also a moult site for paradise shelducks (*Tandorna variegata*) and Canadian geese (*Branta canadensis*), which are common at the 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	High	High quality example of indigenous vegetation on F5.2b – an 'Acutely Threatened' LENZ environment	
Ecological context	High	Near other wetlands in the area, including the nearby Tank Farm Ponds	
		Provides an important link for birds between the coast and the land	
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

The Lake Barrett Scenic Reserve is a popular recreational area.

### Management threats and response

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

Threats to ecological values	Level of risk	Comment
Pest animals	Low to medium	Possums, cats, mustelids, hedgehogs and rats are present
Weeds	Low	Small infestations of gorse, asparagus fern, and water lilies are present
Habitat modification	Medium	The wetland is only partially fenced. Subdivision is occurring closeby.

Site	Site protection Yes/N		Description
Α	Public ownership or formal agreement	Yes	Public Conservation Estate (Scenic Reserve)
В	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
С	Active protection	Yes	Reserve management programme Self-help Possum Control Programme



# **Bayly Road Beach**

At a glance	At a glance (last updated: February 2006)				
TRC reference: Ecological district: Egmont					
Other reference:		LENZ environment:	H1 .3a (0.8 ha)		
			G1.1d (0.8 ha)		
Land tenure:	Crown	Protection status:	A, B, C		
GPS:	2576976E - 6217590N	Area:	1.6 ha		

### Location

The Bayly Road Beach is located 8 km south of Stony River and 6.5 km north of Pungarehu. The foreshore is administered by the Department of Conservation and lies within the Egmont Ecological District.

### **General description**

Bayly Road Beach consists of a large bay that is partially sheltered by an offshore reef and a 2 km length of low-lying coastline, characterised by extensive gently sloping boulder and cobble reefs and beaches. The area is 1.6 hectares in size and contains a small nationally important herbfield. The site also has significant international importance as it contains the most extensive well-preserved geomorphic surface of a volcanic debris avalanche deposit in New Zealand. The Cape Egmont Boat Club and a concrete boat ramp are located in the bay. The Warea River Mouth is located at the north end of the site.

### **Ecological features**

#### Vegetation

Vegetation within the herbfield includes shore/sea spurge *Euphorbia glauca*, which is identified as 'Chronically Threatened (Serious Decline) nationally. The succulent *Crassula manaia*, which is endemic to the Egmont – Waverley coast and is identified as 'Chronically Threatened (Gradual Decline)' is also present.

#### Fauna

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

### **Ecological values**

Ecological values	Rank	Comment	
Rarity and distinctiveness	High	Regionally distinctive in that it contains the 'Chronically Threatened' <i>Crassula manaia</i> , which is endemic to the Egmont-Waverley coast	
		Also contains the 'Chronically Threatened' shore/sea spurge Euphorbia glauca	
Representativeness	High	Contains indigenous vegetation on H.3a – an 'Acutely Threatened' LENZ environment.	
		Also contains indigenous vegetation on G1.1d – an 'At Risk' LENZ environment.	
Ecological context	High	Provides core habitat for Crassula manaia	
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**

Bayly Road Beach also has recreational and cultural values. It is a popular recreational boating, fishing and surfing area. The Warea River Mouth was also the location of a large Maori village and pa sites and a redoubt are still evident.

### Management threats and response

Potential and actual threats to the sustainability of Bayly Road 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	Low	
Habitat modification	Low to medium	Coastal erosion processes

Site	protection	Yes/No	Description
Α	Public ownership or formal agreement	Yes	Crown land (foreshore)
B	Regulatory protection by local government	Yes	General regional or district rules might apply
С	Active protection	No	Self-help Possum Control Programme



## **Blue Rata Scenic Reserve**

At a glance (last updated: February 2006)				
TRC reference:		Ecological district:	Egmont	
Other reference:	LD No 64	LENZ environment:	H1.3a (1.5 ha)	
			H1.3b (31.1 ha)	
Land tenure:	Crown	Protection status:	A, B, C	
GPS:	2590543E - 6217284N	Area:	32.6 ha	

### Location

The Crown owned Blue Rata Scenic Reserve is located 23 km south-west of New Plymouth. It lies in the Egmont Ecological District.

### **General description**

The Blue Rata Scenic Reserve lies approximately 500 metres from Egmont National Park at an altitude of 258 – 304 metres above sea level. The Reserve is a narrow strip of land (32.6 ha) on the boulder strewn river terraces of the Hangatahua (Stony) River. The underlying landforms are part of the Maero Debris Flows.

The Blue Rata Scenic Reserve is the only reserved area of northern rata in the Egmont Ecological District. These trees established terrestrially after the debris flow rather than the more normal establishment in the crowns of trees. Their trunks are straight and symmetrical. The timber is dense, straight grained, durable and of a blue tinge – hence the name of the Reserve.

### **Ecological features**

#### Vegetation

The canopy is predominantly kamahi (*Weinmannia racemosa*) forest with some tawa (*Beilschmiedia tawa*), particularly at the lower end of the Reserve. Scattered above the canopy are very large northern rata (*Metrosideros robusta*) (>25 metres in height and >2 metres in diameter at breast height).

#### Fauna

The New Zealand pigeon (*Hemiphaga novaeseelandiae*), which is identified as 'Chronically Threatened (Gradual Decline)', is present in the area.

### **Ecological values**

Ecological values	Rank	Comment	
Rarity and distinctiveness	High	Regionally distinctive in that it contains northern rata, which is present elsewhere in the region but not at this density nor establishe terrestrially	
		Contains the 'Chronically Threatened' New Zealand pigeon	
Representativeness	High	Contains indigenous vegetation on 'Acutely Threatened' (H1.3a) and 'Underprotected' (H1.3b) LENZ environments	
Ecological context	Medium	Core habitat for distinctive terrestrial established northern rata	
		Also very close to other Key Native Ecosystems – Egmont National Park and QE II covenants 5/06/040B, 5/06/081 and 5/06040C.	
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

Also has recreation values with short walking tracks.

### Management threats and response

Potential and actual threats to the sustainability of Blue Rata 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	Low	
Habitat modification	Low	Natural erosion caused by the changing course of Hangatahua (Stony) River

Site	protection	Yes/No	Description
Α	Public ownership or formal agreement	yes	Public Conservation Estate (Scenic Reserve)
В	Regulatory protection by local government	Yes	General regional or district rules might apply
C	Active protection	Yes	Possum control



## **Brymax**

At a glance (last updated: February 2006)				
TRC reference:		Ecological district:	Manawatu	
Other reference:		LENZ environment:	F5.2c	
Land tenure:	Private	Protection status:	B, C	
GPS:	2630200E - 6169200N	Area:	4.3 ha	

### Location

The Brymax site is located on privately owned land, 15 km south of Hawera. The site lies in the Manawatu Plains Ecological District.

### **General description**

The Brymax site is a small (4.3 ha) lowland forest, comprising of modified and primary titoki – kahikatea – tawa forest. This forest is representative of what was once a common vegetation type within the Ecological District. Forests of this type have largely been cleared on flat terraced land for farming purposes with the remaining remnants being situated in valleys, as is the case in this example.

The forest canopy, understorey and groundcover are all in good condition due to the steep terrain and low stock damage. The Waikaikai Stream flows through the forest remnant. Two other covenant areas are within 10 km of the Brymax site.

### **Ecological features**

#### Vegetation

Vegetation consists of kahikatea (*Dacrycarpus dacrydioides*), tawa (*Beilschmiedia tawa*) and totara emergent over a canopy of titoki (*Alectryon excelsus*), marbleleaf (*Carpodetus serratus*), rewarewa (*Knightia excelsa*), kaikomako (*Pennantia corymbosa*), and pigeonwood (*Hedycarya arborea*).

The understorey consists of lancewood (*Pseudopanax crassifolium*), mahoe (*Melicytus ramiflorus*), karamu (*Coprosma robusta*), kohukohu (*Pittosporum tenuifolium*), mapou (*Myrsine australis*), five finger (*Pseudopanax arboreus*), wineberry (*Aristotelia serrata*), and fuchsia (*Fuchsia excorticata*).

Groundcover consists of seedlings of canopy and understorey species, a number of fern species and supplejack (*Ripogonum scandens*). Epiphytes

and lianes include rata (*Metrosideros* spp.), white clematis (*Clematis paniculata*), and bush lawyer (*Rubus cissoides*).

#### Fauna

The Brymax site provides habitat for a number of common forest bird species. Harrier hawk (*Circus approximans*), pukeko (*Porphyrio porphyrio*) and morepork (*Ninox novaeseelandiae*), are also present.

### **Ecological values**

Ecological values	Rank	Comment	
Rarity and distinctiveness	Low	Does not contain any 'Acutely Threatened' species or species uncommon in Taranaki	
Representativeness	High	Contains indigenous vegetation on F5.2c – an 'Acutely Threatened' LENZ environment	
Ecological context	Medium	The area connects with another remnant across the road as well as other small bush areas on the coast-side (west) of the property	
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 the Brymax site's ecological values are as follows:

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

Site	protection	Yes/No	Description
Α	Public ownership or formal agreement	No	QEII Covenant in progress
В	Regulatory protection by local government	Yes	General regional or district rules might apply
С	Active protection	Yes	Site completely fenced



# Bushy Park (Tikorangi)

At a glance (last updated: February 2006)			
TRC reference:		Ecological district:	Egmont
Other reference:	DOC 77008	LENZ environment:	F5.2a
Land tenure:	Private	Protection status:	A, B, C
GPS:	2621965E - 6238518N	Area:	15.0 ha

### Location

Bushy Park is located on private land along Tikorangi Road, 7.8 km southeast of Waitara. It lies in the Egmont Ecological Region.

### **General description**

Bushy Park comprises of two small (15.0 ha) semi-coastal forest remnants on uplifted marine terrace.

## **Ecological features**

#### Vegetation

Bushy Park consists primarily of tawa (*Beilschmedia tawa*) forest with canopy associates of puriri (*Vitex lucens*) and kohekohe (*Dysoxylum spectabile*). Pukatea (*Laurelia novaezelandiae*) is a common canopy component in the poorly drained gullies.

#### Fauna

Unknown. No specific indigenous fauna species have been recorded for Bushy Park.

## **Ecological values**

Ecological values	Rank	Comment	
Rarity and distinctiveness	Low	Does not contain any 'Acutely Threatened' species or species uncommon in Taranaki	
Representativeness	High	Contains indigenous vegetation on ecosystem type (F5.2c) that is 'Acutely Threatened'	
Ecological context	Medium	Relatively isolated remnants	
Sustainability	High	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 ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Medium - Iow	Possums, cats, mustlids, and rats
Weeds	Low	Wandering willy, woolly nightshade
Habitat modification	Medium	Edge effects have modified these small remnants

Site	protection	Yes/No	Description
Α	Public ownership or formal agreement	Yes	Conservation Covenant with Department of Conservation
В	Regulatory protection by local government	Yes	General regional or district rules might apply
С	Active protection	Yes	Fenced, possum control



## **Carrington Road A**

At a glance (last updated: February 2006)				
TRC reference:		Ecological district:	Egmont	
Other reference:	NPDC – SNA 17	LENZ environment:	F5.3b	
	NPDC ID5887			
	NPDC ID5889			
	NPDC ID5893			
	QEII 5/06/017			
Land tenure:	Private	Protection status:	A, B, C	
GPS:	2599000E - 6222500N	Area:	200.5 ha	

### Location

The Carrington Road A site is located on privately owned land, 24 km south of New Plymouth. The site is within the Egmont Ecological District.

### **General description**

The Carrington Road A site covers a large (200.5 ha) area of lowland primary and secondary forest. It lies adjacent to the Egmont National Park with tributaries of the Te Henui Stream meandering through the area.

### **Ecological features**

#### Vegetation

Rata (*Metrosideros robusta*) is emergent over a canopy of Kamahi (*Weinmannia racemosa*). Some areas have previously been cleared but now support secondary kamahi forest. Tawa (*Beilschmedia tawa*) and hinau (*Elaeocarpus dentatis*) are common canopy associates. The canopy has been noted as being in excellent condition with good undergrowth.

### Fauna

A number of nationally threatened fish species are present in the area. The Te Henui Stream has significant populations of large galaxiids. The tributaries in this area possibly contain 'Chronically Threatened (Gradual Decline)' short-jawed kokopu (*Galaxias postvectis*).

Streams in the area also have banded kokopu (*G. fasciatus*) and koaro (*G. brevipinnis*) and the area has healthy and diverse bird populations.

New Zealand pigeon (*Hemiphaga novaeseelandiae*), which is identified as 'Chronically Threatened (Gradual Decline)', is also present in the area.

### **Ecological values**

Ecological values	Rank	Comment	
Rarity and distinctiveness	Medium	Contains the 'Chronically Threatened' New Zealand pigeon and possibly short-jawed kokopu	
Representativeness	Low	LENZ environment not threatened	
Ecological context	High	High quality example of indigenous vegetation in an ecosystem that is not threatened but provides connectivity between lowland remnants and higher altitude forests in the Egmont National Park. Also an important food source for birds	
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 Carrington Road A'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, blackberry and Himalayan honeysuckle present
Habitat modification	Low	Covenanted area has been fenced to exclude livestock

Site	Site protection Yes/No		Description
A Public ownership or Yes formal agreement		Yes	In part: QEII Covenant (1 of 12 land owners, covering 24% of the site)
В	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
С	Active protection	Yes	Covenanted area has been fenced Self-help Possum Control Programme



# **Carrington B**

At a glance (last updated: February 2006)			
TRC reference:		Ecological district:	Egmont
Other reference:	DOC 77002	LENZ environment:	F5.2b
Land tenure:	Private	Protection status:	А, В
GPS:	2591718E - 6219092N	Area:	16.9 ha

### Location

The Carrington Road B site is located on privately owned land, 20 km south of New Plymouth. The site is in the Egmont Ecological District.

### **General description**

The Carrington B site is a small (16.9 ha) remnant of lowland tawa forest on the Pouakai Ring Plain. The forest lies on a gentle slope adjoining a small stream near the Egmont National Park. It is significant in that tawa forest does not exend up into the Park due to its altitude limit.

### **Ecological features**

#### Vegetation

The Carrington B site comprises primarily of tawa (*Beilschmiedia tawa*). Hinau (*Elaeocarpus dentatus*) is also common in the canopy with kamahi (*Weinmannia racemosa*) frequent on the stream margin.

Other species present include pigeonwood (*Hedycaryea arborea*), and mahoe (*Melicytus ramiflorus*).

#### Fauna

Birdlife present at the Carrington B site includes New Zealand pigeon (*Hemiphaga novaseelandiae*), which is identified as 'Chronically Threatened (Gradual Decline)'.

### **Ecological values**

Ecological values	Rank	Comment
Rarity and distinctiveness	Medium	Contains the "Chronically Threatened' New Zealand pigeon
Representativeness	High	Contains indigenous vegetation on F5.2b – an 'Acutely Threatened' LENZ environment
Ecological context	High	Connected to Egmont National Park by remnant riparian vegetation. Also provides an important lower altitude habitat for birds
Sustainability	High	Key ecological processes still influence the site. Under appropriate management, it can remain resilient to existing or potential threats

#### **Other values**

The Carrington B site adjoins State Highway 3A and has scenic and landscape values.

### Management threats and response

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

Threats to ecological values	Level of risk	Comment
Pest animals	Medium - Iow	Possums, cats, mustlids, and rats
Weeds	Low	
Habitat modification	Low	Fenced

Site	protection	Yes/No	Description
Α	A Public ownership or Yes formal agreement		Conservation Covenant with Department of Conservation
В	Regulatory protection by local government	Yes	General regional or district rules might also apply
С	Active protection	Yes	Fenced (in 1987) Possum control



## **Carrington Road C**

At a glance (last updated: February 2006)			
TRC reference:		Ecological district:	Egmont
Other reference:	NPDC – SNA 31	LENZ environment:	F5.3b
Land tenure:	Private	Protection status:	B, C
GPS:	2598000E - 6224500N	Area:	114.7 ha

### Location

Carrington Road C forest is located on privately owned land, 10 km south east of Oakura. The site is in the Egmont Ecological District.

### **General description**

The Carrington Road C site is a large (114.7 ha) lowland forest comprising of modified primary rata/kamahi forest. The forest is typical of the original lowland forest on swampy debris flows. However, much of this forest type has been cleared elsewhere or is more highly modified and degraded. The topography is flat to rolling and dissected by a number of streams that are fed from the Egmont National Park.

The property borders Egmont National Park, with Carrington Road splitting the two. Being at a lower altitude, the forest type is different from, and therefore complements the values of, Egmont National Park across the road. The forest also acts as a link for wildlife between the Kaitake Ranges and Pouakai Ranges. Two other covenant areas are nearby.

### **Ecological features**

#### Vegetation

The Carrington Road C forest consists of rata (*Metrosideros robusta*), kahikatea (*Dacrycarpus dacrydiodes*) and miro (*Prumnopitys ferruginea*) emergent over a canopy of kamahi (*Weinmannia racemosa*), tawa (*Beilschmiedia tawa*), thin-barked totara (*Podocarpu halli*), marbleleaf (*Carpodetus serratus*), hinau (*Elaeocarpus dentatus*), and pigeonwood (*Hedycarya arborea*).

Mahoe (*Melicytus ramiflorus*), *Coprosma* species, fivefinger (*Pseudopanax arboreus*) and lancewood (*Pseudopanax crassifolium*) are

present in the understorey while manuka (*Leptospermum scoparium*) is found on the margins.

Groundcover consists of many different fern species, and seedlings of species represented in the canopy and understorey. Epiphytes and lianes include tree orchids, kiekie (*Freycinetia baueriana* subsp. *banksii*), supplejack (*Ripogonum scandens*) clematis (*Clematis paniculata*), white rata vine (*Metrosideros* sp.), and bush lawyer (*Rubus cissoides*).

#### Fauna

Wildlife found in Carrington Road C include New Zealand pigeon (*Hemiphaga novaeseelandiae*), which is identified as being 'Chronically Threatened (Gradual Decline)'. Bellbird (*Anthornis melanura melanura*) and tui (*Prosthemadera novaeseelandiae*) are also present. Gecko have also been found within the forest.

The high water quality in the streams that run through the forest suggest a good population of freshwater invertebrates. Kiri Stream has a good population of short jawed kokopu (*Galaxias postvectis*) and the longfin eel (*Anguilla dieffenbachia*), which are both identified as being 'Chronically Threatened (Gradual Decline)'. Koaro (*G. brevipinnis*) is also present in the stream.

### **Ecological values**

Ecological values	Rank	Comment	
Rarity and Medium distinctiveness		Contains the 'Chronically Threatened' New Zealand pigeon	
		Kiri Stream also contains the 'Chronically Threatened' short jawed kokopu and longfin eel	
Representativeness	Low	LENZ environment not threatened	
Ecological context	High	Large high quality example of indigenous vegetation in an ecosyste that is not threatened but provides connectivity between lowland remnants and higher altitude forests in the Egmont National Park a the Kaitake Ranges closer to the coast	
Sustainability	Positive	The forest is large, of a good even shape, and is self sustaining. It is in very 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 Carrington Road C's ecological values are as follows:

Threats to ecological values	Level of risk	Comment	
Pest animals	Low	Possums, cats, mustelids, and rats	
Weeds	Low		
Habitat modification	Low	Stock pressure is low	

Site	protection	Yes/No	Description
A	Public ownership or formal agreement	No	
В	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
C	Active protection	Yes	Self-help Possum Control Programme



# **Clarke Road Wetland**

At a glance	At a glance (last updated: February 2006)					
TRC reference:	0916-0	Ecological district:	Egmont			
	0093-0, 1021-0					
Other reference:	NPDC SNA 19	LENZ environment:	F5.2a			
	NPDC ID7147, ID7148, ID26932, ID26945					
	QEII 5/06/100					
	QEII 5/06/101					
Land tenure:	Private	Protection status:	A, B, C			
GPS:	1.2619069E - 6234068N	Area:	1. 2.4 ha			
	2. 2619177E – 6234093N		2. 2.2 ha			
		Total	4.6 ha			

### Location

The Clarke Road Wetland is located on privately owned land, 10 km northeast of Inglewood. The wetland is in the Egmont Ecological District.

### **General description**

The Clarke Road Wetland lies just off Clarke Road and is bisected by a private road (York Road). One side covers 2.4 ha and the other covers 2.2 ha. This palustrine wetland contains secondary regenerating semi-natural

forest and induced raupo swamp, which provide habitat for native water fowl. The wetland is located in the headwaters of the Mangatui Stream and set among hills on the Pouakai Ring Plain. Although the area was originally swampy, the dammed Mangatui Stream has slightly raised the water table in the area.



## **Ecological features**

#### Vegetation

The Clarke Road Wetland supports an induced type of raupo reedland (*Typha orientalis*) – the result of previous forest clearance and the damming of the Mangatui Stream.

Secondary forest in the wetland comprising pukatea (*Laurelia novaezealandiae*) and swamp maire (*Syzgium maire*), has been logged and partly cleared. Kahikatea (*Dacrycarpus dacrydioides*) is common in parts of the canopy while kiekie (*Freycinetia baueriana* subsp. *banksii*) is found in an area in the middle of the forest.

There is a small area of matai (*Prumnopitys taxifolia*) and rimu (*Dacrydium cupressinum*) on a hill on the margin of the swamp forest.

### Fauna

The Clarke Road site supports a variety of bird life, including the spotless crake (*Porzana tabuensis plumbea*), which is identified as 'At Risk (Sparse)' and is particularly uncommon in Taranaki. The New Zealand pigeon (*Hemiphaga novaeseelandiae*), which is identified as being 'Chronically Threatened (Gradual Decline)', is also present.

Also present are tui (*Prosthemadera novaeseelandiae*), pukeko (*Porphyrio porphyrio*), grey warbler (*Gerygone igata*), fantail (*Rhipidura fulginosa*), and Australasian harrier (*Circus approximans*).

### **Ecological values**

Ecological values	Rank	Comment	
Rarity and distinctiveness	High	Contains the 'At Risk' spotless crake, which is particularly uncommon in Taranaki	
		Also contains the 'Chronically Threatened' New Zealand pigeon	
Representativeness	High	Contains indigenous vegetation on F5.2a – and 'Acutely Threatened' LENZ environment	
Ecological context	Medium	Provides habitat for the threatened New Zealand pigeon and spotless crake	
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	

**Management threats and response** Potential and actual threats to the sustainability of the Clarke Road wetland's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Low to medium	Possums are present at low densities. Hedgehogs, rats and rabbits are also present
Weeds	Low to medium	Willow, gorse, blackberry, barberry, and wandering willy are present
Habitat modification	Low	Formally protected and fenced

Site	Site protection		Description
Α	Public ownership or formal agreement	Yes	QEII Covenant covering most of the site
В	Regulatory protection by local government	Yes	<ul> <li>Site specific rules apply</li> <li>Taranaki Regional Council rules for wetlands (refer Appendix IIB of the Regional Fresh Water Plan)</li> <li>New Plymouth District Council rules for Significant Natural Areas (refer Appendix 21 of the District Plan)</li> <li>General regional or district rules might also apply</li> </ul>
С	Active protection	Yes	Fenced Enhancement planting along the York Road boundary fence Self-help Possum Control Programme



## Condon's Bush

At a glance	At a glance (last updated: February 2006)				
TRC reference:		Ecological district:	Manawatu Plains		
Other reference:	STDC SNA 31	LENZ environment:	F1.3b (56.8 ha)		
			F5.2c (23.6 ha)		
Land tenure:	Private	Protection status:	B, C		
GPS:	2652200E - 6163500N	Area:	80.5 ha		

### Location

Condon's Bush is located on privately owned land approximately 5 km north west of Waverley, and is within the Manawatu Plains Ecological District.

### **General description**

Condon's Bush covers 80.5 ha and is located in a deep gully formed through the incision of the Moumahaki Stream through marine terraces (Rapanui Formation). This site is significant as a representative example of a range of communities. While found individually elsewhere in the Manawatu Plains Ecological District, they are all found here in one viable area.

This area has had a patchy history of logging, and contains a small wetland of toe toe on the floodplain. The wide range of landforms and history have resulted in a high diversity of indigenous flora species.

### **Ecological features**

#### Vegetation

Condon's Bush contains a wide range of vegetation types and a high diversity of species. Most of the steeper faces are covered in tawa (*Beilschmiedia tawa*) with a few emergent rewarewa (*Knightia excelsa*). Titoki (*Alectryon excelsus*), pukatea (*Laurelia novaezelandiae*) and hinau (*Elaeocarpus dentatus*) are also present in the canopy.

The subcanopy is dominated by kawakawa (*Macropiper excelsum*), along with mahoe (*Melicytus ramiflorus*) and turepo (*Streblus heterophylla*). Hangehange (*Geniostoma rupestre* var. *ligustrifolium*) and supplejack (*Ripogonum scandens*) are found in the understorey. Ground cover is sparse and includes common ferns such as shield fern (*Polystichum* sp.) and thread fern (*Blechnum filiforme*) as well as parataniwha (*Elatostema rugosum*) and

the grass Oplismenus imbecillus.

Further north the forest has been cleared and dense scrub dominates. This scrub is made up of mamaku (*Cyathea medullaris*), mahoe (*Melicylus ramifloris*), lancewood (*Pseudopanax crassifolium*), kohuhu (*Pittosporum tenuifolium*), mapou (*Myrsine australis*) and koromiko (*Hebe stricta*).

The floodplain at the base of the gully is more diverse in its vegetation than the sides of the gully. This is a result of local variations in water table, the effects of flooding and disturbance. Much of the floodplain forest is dominanted by mature tawa-pukatea forest with some kahikatea (*Dacrycarpus dacrydiodes*) found towards the south. Epiphytes associated with the tall pukatea include puka and *Collospermum hastatum*.

Nearer the stream the canopy consists of lacebark (*Hoheria sexstylosa*), lancewood, titoki, hinau, turepo and kaikomako (*Pennantia corymbosa*). Kamahi (*Weinmannia racemosa*), rimu (*Dacrydium cupressinum*), miro (*Prumnopitys ferruginea*), mamaku (*Cyathea medullaris*), and wheki are also present.

A number of other small trees and shrubs are present through this part of Condon's Bush. These include the species noted on the risers as well as marbleleaf (*Carpodetus serratus*), ngaio (*Myoporum laetum*), karaka (*Corynocarpus laevigatus*), raurekau (*Coprosma grandifolia*), shining karamu (*Coprosma lucida*), pate (*Schefflera digitata*), wineberry (*Aristotelia serrata*), tree fuchsia (*Fuchsia excorticata*), rangiora (*Brachyglottis repanda*), heketara (*Olearia rani*), manuka (*Leptospermum scoparium*), and whekiponga (*Dicksonia fibrosa*). Climbers include kiekie (*Freycinetia baueriana* subsp. *banksii*) and white rata vine (*Metrosideros* sp.)

Two areas of the floodplain are very different from the forested areas. Here toetoe (*Cortaderia toetoe*) dominates over a ground cover of *Carex geminata*. Some wheki (*Dicksonia squarrosa*) and giant umbrella sedge (*Cyperus ustulatus*), are also present.

#### Fauna

Unknown. No specific indigenous fauna species have been recorded for Condon's Bush.

## **Ecological values**

Ecological values	Rank	Comment	
Rarity and distinctiveness	Medium	Contains tall, mature kamahi, which are uncommon in the ecological district.	
Representativeness	High	Contains high quality indigenous vegetation on F5.2c – an 'Acutely Threatened' LENZ environment	
Ecological context	Medium	Representative example of a range of communities that may be found individually in other areas	
Sustainability	Positive	In very 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 Condon's Bush's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Medium to high	Possums, cats, mustelids, and rats
Weeds	Low to medium	Willows and poplars are present in places along stream
Habitat modification	Low	The area is mostly fenced, some sheep are allowed to graze in a small grassed area (effect is considered to be minor)

Site	protection	Yes/No	Description
Α	Public ownership or formal agreement	No	
В	Regulatory protection by local government	Yes	<ul> <li>Site specific rules apply</li> <li>South Taranaki District Council rules for Significant Natural Areas (refer Schedule II of the District Plan)</li> <li>General regional or district rules might also apply</li> </ul>
С	Active protection	Yes	The area is mostly fenced



## **Corbett Lake Scenic Reserve**

At a glance (last updated: February 2006)			
TRC reference:	0888-0	Ecological district:	Egmont
Other reference:	DOC 70375	LENZ environment:	F5.2b (3.0 ha)
			H1.3a (1.2 ha)
Land tenure:	Crown	Protection status:	A, B, C
GPS:	2589064E - 6219232N	Area:	4.2 ha

### Location

The Crown-owned Corbett Lake Scenic Reserve is located 5 km south-east of Okato and lies in the Egmont Ecological District.

### **General description**

The Corbett Lake Scenic Reserve (4.2 ha) contains a small lake, palustrine and lacustrine wetland, and is surrounded by native bush on three sides. It is located in a depression on lahar deposits. Much of the area has been covered by old debris flows from Mt Taranaki which has resulted in a very stony landscape with bouldery hummocks and swampy depressions.



### **Ecological features**

#### Vegetation

The Corbett Lake Scenic Reserve contains a good representation of wetland vegetation. Vegetation surrounding Corbett Lake includes variable amounts of kamahi (*Weinmannia racemosa*), swamp maire (*Syzgium maire*), twiggy coprosmas, karamu (*Coprosma lucida*), pukatea (*Laurelia novae-zelandiae*) and manuka (*Leptospermum scoparium*). This vegetation is located in the buffer zone between the lake and the forest behind. It is all less than 5 metres high.

#### Fauna

Indigenous birds found in the Reserve include the New Zealand pigeon (*Hemiphaga novaeseelandiae*), which is identified as 'Chronically Threatened (Gradual Decline)'. Other native birds present are fantail (*Rhipidura fulginosa*), harrier hawk (*Circus approximans*), and pukeko (*Porphyrio porphyrio*).

The Reserve is a moulting site for paradise shelduck (*Tadorna variegata*). Canadian geese (*Branta canadensis*) are also present at the site.

### **Ecological values**

Ecological values	Rank	Comment
Rarity and distinctiveness	Medium	Contains the 'Chronically Threatened' New Zealand pigeon
Representativeness	High	A small but high quality example of indigenous vegetation on 'Acutely Threatened' (F5.2b, H1.3a) LENZ environments
Ecological context	Medium to high	Wetland is a refuge for wildlife, particularly waterfowl that also utlise other wetlands in the region
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 Corbett Lake Scenic Reserve's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Low to medium	Possums, cats, goats, mustelids and rats
Weeds	Medium	Blackberry and bracken
Habitat modification	Low to medium	Illegal shooting of waterfowl on the lake

Site	protection	Yes/No	Description
Α	Public ownership or formal agreement	Yes	Public Conservation Estate (Scenic Reserve)
В	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
С	Active protection	Yes	Fenced Enhancement plantings Self-help Possum Control Programme



## **Donald Warea**

At a glance (last updated: February 2006)			
TRC reference:		Ecological district:	Egmont
Other reference:	DOC 77003	LENZ environment:	F5.2b
Land tenure:	Private	Protection status:	A, B
GPS:	2582113-6218123	Area:	2.4 ha

### Location

The Donald Warea site is located on private land, 1 km east of Warea and 8 km north east of Cape Egmont. The site lies in the Egmont Ecological District.

### **General description**

The Donald Warea site is a small (2.4 ha) semi-coastal forest remnant on lahar mounds and intermound areas of the Egmont Ring Plain. The vegetation was severely damaged during Cyclone Bola in March 1988.

### **Ecological features**

### Vegetation

The Donald Warea site comprises primarily of secondary kahikatea (*Dacrycarpus dacrydioides*) forest with a small area of secondary kohekohe (*Dysoxylum spectabile*) forest. Other species in the canopy include karaka (*Corynocarpus laevigatus*), matai (*Prumnopitys taxifolia*), rewarewa (*Knightia excelsa*), and tawa (*Beilschmiedia tawa*).

#### Fauna

Unknown. No specific indigenous fauna species have been recorded for the Donald Warea site. However, the area is likely to be habitat and food source for New Zealand pigeon (*Hemiphaga novaseelandiae*), which is identified as 'Chronically Threatened (Gradual Decline)'.

### **Ecological values**

Ecological values	Rank	Comment
Rarity and distinctiveness	Medium	Contains the 'Chronically Threatened' New Zealand pigeon
Representativeness	High	Contains indigenous vegetation on F5.2b – an 'Acutely Threatened' LENZ environment
Ecological context	Medium	Small remnant at some distance from other forest remnants but likely to be important food source for birds, particularly kereru
Sustainability	Medium	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 ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Medium - Iow	Possums, cats, mustlids, and rats
Weeds	Low	
Habitat modification	Low	

Site	Site protection		Description
Α	Public ownership or formal agreement	Yes	Conservation Covenant with Department of Conservation
В	Regulatory protection by local government	Yes	General regional or district rules might also apply
<b>C</b>	Active protection	Yes	Fenced Possum control



## **Dorset Road Bush**

At a glance (last updated: February 2006)				
TRC reference:	0912-0	Ecological district:	Egmont	
Other reference:	NPDC SNA No. 24	LENZ environment:	F5.2b	
Land tenure:	Private	Protection status:	B, C	
GPS:	2608891E - 6235849N	Area:	4.1 ha	

## Location

Dorset Road Bush is located on privately owned land on the south-eastern outskirts of New Plymouth. It lies in the Egmont Ecological District.

# General description

Dorset Road Bush is a palustrine wetland forest, 4.1 ha in size. It is located on a poorly drained hollow on north Taranaki's uplifted marine terrace. It is typical of forest that was once more abundant in poorly drained parts of Taranaki. Such areas are now rare.



## **Ecological features**

#### Vegetation

Dorset Road Bush includes pukatea (*Laurelia novaezelandiae*) forest and *Coprosma tenuicaulis/Carex* species sedgeland.

#### Fauna

Fauna recorded at the Dorset Road Bush include tui (*Prosthermadera novaeseelandiae*).

## **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	High quality example of indigenous vegetation on F5.2b – an 'Acutely Threatened' LENZ environment
Ecological context	Medium	Close to Umutekai and other small forest remnants
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 Dorset Road 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 to medium	Gorse and blackberry
Habitat modification	Medium	The site is only fenced on one side, so stock grazing is a threat in some parts. Drainage also poses a threat as there is an existing drain to Egmont Road where a small pond has been developed

Site	protection	Yes/No	Description
Α	Public ownership or formal agreement	No	
B Regulatory protection by		Yes	Site specific rules apply
	local government		<ul> <li>Taranaki Regional Council rules for wetlands (refer Appendix IIB of the Regional Fresh Water Plan)</li> </ul>
			<ul> <li>New Plymouth District Council rules for Significant Natural Areas (refer Appendix 21 of the District Plan)</li> </ul>
			General regional or district rules might also apply
С	Active protection	Yes	The wetland is fenced on one side
			Self-help Possum Control Programme


## **Dudley Road Wetland**

At a glance	At a glance (last updated: February 2006)				
TRC reference:	0925-0	Ecological district:	Egmont		
	0010-0				
Other reference:	NPDC SNA No. 15	LENZ environment:	H1.3b		
	QEII 5/06/131				
Land tenure:	Private	Protection status:	A, B, C		
GPS:	2609104E - 6220673N	Area:	7.4 ha		

### Location

The Dudley Road Wetland is located on privately owned land, 7.5 km southwest of Inglewood. The wetland lies in the Egmont Ecological District.

### **General description**

The Dudley Road Wetland is a palustrine wetland that covers 7.4 ha. The site is located on poorly drained debris flows which are Stratford Formations and Lepperton lahar flows. This site contains kamahi and swamp maire forest.

### **Ecological features**

### Vegetation

The Dudley Road Wetland consists mainly of kamahi *(Weinmannia racemosa)* and swamp maire *(Syzgium maire)*. The canopy is mixed with occasional associations of young hinau *(Elaeocarpus dentatus)*, rimu *(Dacrydium cupressinum)*, lancewood *(Pseudopanax crassifolium)*, toro and marbleleaf *(Carpodetus serratus)*. Pukatea *(Laurelia novaezelandiae)* is also common throughout the forest.

The understorey consists of mahoe (*Melicytus ramiflorus*), pigeonwood (*Hedycarya arborea*), wheki (*Dicksonia squarrosa*), and large amounts of swamp coprosma (*Coprosma tenuicaulis*). The ground cover is predominantly fern species, kiekie (*Freycinetia baueriana* subsp. *banksii*), and sedges (*Carex* spp.).

### Fauna

Unknown. No specific indigenous fauna species have been recorded for the Dudley Road Wetland.

### **Ecological values**

Ecological values	Rank	Comment	
Rarity and distinctiveness	Medium	Not known to contain any 'Acutely Threatened' species, or species uncommon to Taranaki	
Representativeness	Medium	Small example of indigenous vegetation on H1.3b – a LENZ environment that is 'Underprotected'. However, swampy maire forest covers <2% of its former extent	
Ecological context	High	Provides important linkages between the Egmont National Park and other lowland forest remnants in the vicinity. Also a very good source of food for wildlife	
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	

### Management threats and response

Potential and actual threats to the sustainability of the Dudley 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	
Habitat modification	Medium	The site is well fenced and legally protected
		Drains adjacent to the site believed to be affecting wetland sequences on-site

Site	Site protection Ye		Description
Α	Public ownership or formal agreement	Yes	QEII Covenant covering the whole site
В	Regulatory protection by local government	Yes	<ul> <li>Site specific rules apply</li> <li>Taranaki Regional Council rules for wetlands (refer Appendix IIB of the Regional Fresh Water Plan)</li> <li>New Plymouth District Council rules for Significant Natural Areas (refer Appendix 21 of the District Plan)</li> <li>General regional or district rules might also apply</li> </ul>
C	Active protection	Yes	Fenced Self-help Possum Control Programme



## **Egmont National Park**

At a glance (last updated: February 2006)			
TRC reference:	0891-0	Ecological district:	Egmont
Other reference:	DOC 70001	LENZ environment:	C1.1b (91.1 ha) C1.3a (11.0 ha)
			D1.1 c (11.1 ha)
			D4.1c (18.8 ha)
			D4.1d (7.5 ha)
			F1.1b (653.9 ha)
			F5.2a (267.1 ha)
			F5.2b (481.7 ha)
			F5.3a (3,790.2 ha)
			F5.3b (7,523.3 ha)
			F6.2a (195.1 ha)
			F7.2a (10.5 ha) F7.3a (6.0 ha)
			H1.3b (1,149.2 ha)
			H4.1a (4,202.5 ha)
			H4.1b (3,491.6 ha)
			H4.1c (3,939.9 ha)
			P4.1b (1,530.8 ha)
			P7.1b (84.7 ha)
Land tenure:	Crown	Protection status:	A ,B, C
GPS:	Various locations	Area:	34,261 ha

### Location

The Egmont National Park is Crown owned land covering the area around Mount Taranaki and the Pouakai and Kaitake ranges. It lies in the Egmont Ecological District.

### **General description**

Egmont National Park covers 34,156 ha. It encompasses a diverse range of habitat and vegetation types including lowland forests, fernland and scrub, montane forest, mire (wetland) vegetation, subalpine scrub, shrubland and tussockland, alpine herbfields and wetlands.

Vegetation patterns in the National Park are complex and are influenced by climate, parent rock material, slope, aspect, drainage, soils and the impact of past and ongoing volcanic disturbances. The National Park also supports a wide range of native fauna. The area has been protected as a National Park since 1881.

### **Ecological features**

#### Vegetation

The quality and condition of the vegetation in the Egmont National Park is excellent. Lowland forest covers more than half of the National Park (>16,765 ha). There are nine main forest types – rimu (Dacrydium cupressinum)-rata (Metrosidero srobusta)/kamahi (Weinmannia racemosa) forest, rimu-rata/mahoe (Melicytus ramiflorus) forest, kahikatea (Dacrycarpus dacrydioides)rimu/kamahi forest, rata-kamahi forest, kamahi-toro (Myrsine salicina) forest, rata forest, kamahi forest, tawa forest, and kohekohe (Dysoxylum spectabile) forest.

Pure stands of mamaku tree fern (*Cyathea medullaris*) and broadleaved scrub cover most of the lower north-western slopes of the Kaitake Ranges. Montane forest composed mainly of kamahi-thin barked totara (*Podocarpus halli*) occurs between 760m and 1,100m on Mount Taranaki and Pouaki and covers nearly one

Wetlands (principally associated with mire vegetation, subapline scrub and shrubland) represent but a small part of the National Park

third of the Park area

(11,165 ha).





(total estimated wetland area is 782 ha or 2.3% of the Park area). However, the wetlands are significant, not only because of the the richness and diversity of flora present, but because they represent the largest wetland remnants in Taranaki. The 100 ha Ahukawakawa Swamp, which is the largest wetland in Taranaki, alone contains nearly 260 different species of higher plants and several of these are unknown elsewhere in the Park and the region.

At the higher altitudes, subalpine and alpine tussockland, alpine herbfield and alpine gravelfields are predominant. Common species include *Hebe*, *Coprosma* and *Carex* species. Common components of the alpine herbfields include mosses such as *Dicranoloma billardierei* and different small herbs and grasses.

Notable flora includes *Melicytus drucei*, which is found no where else in New Zealand, and the Chronically Threatened (Serious Decline) but regionally rare wood rose (*Dactylanthus taylorii*). Outside the National Park, the plant *Dactylanthus taylorii* has only been recorded at one other site in Taranaki.

#### Fauna

Egmont National Park is habitat for many of the 76 bird species that occur in the Egmont Ecological District. Birds in the Park include blue duck (*Hymenolaimus malachorhynchos*) the 'Acutely Threatened (Nationally Vulnerable)' New Zealand falcon/kararea (*Falco novaeseelandiae*).

#### 'Chronically

Threatened' species present are the North Island brown kiwi (Serious decline), and New Zealand pigeon (Hemiphaga novaeseelandiae), and rifleman (both identified as in Gradual Decline). The fernbird (Bowdleria punctata vealeae). identified as being nationally 'At Risk (Sparse)', is also present, as is the tomtit (Petroica



macrocephala) and bellbird (Anthornis melanura melanura).

Egmont National Park also provides habitat for the forest gecko and brown skinks. New Zealand's largest terrestrial amphipod 'hopper', *Tara Taranaki*, is known only in the Park, as is the giant land snail *Powelliphanta* 'Egmont', which has been identified as being 'At Risk (Range restricted).

Of New Zealand's 31 indigenous fish species, 13 have been recorded in, or near, the Park. They include long finned eels (*Anguilla dieffenbachii*), short finned eels (*A. australis*) and common bullies (*Gobiomorphus cotidianus*).

A number of nationally threatened species are also present. These include

giant kokopu (*Galaxias argenteus*), short-jawed kokopu (*G. postvectis*), banded kokopu (*G. fasciatus*), and koaro (*G. brevipinnis*). The native freshwater crayfish, koura (*Paranephrops planifrons*) is also present. Brown mudfish have been recorded in wetland swamps.

Most rivers within the Park carry stocks of brown trout (*Salmo trutta*) and rainbow trout (*Oncorhynchus mykiss*).



### **Ecological values**

Ecological values	Rank	Comment	
Rarity and distinctiveness	High	Contains blue duck ('Acutely Threatened'), regionally uncommon fernbird ('At Risk'), and <i>Melicytus drucei</i> and <i>Powelliphanta</i> 'Egmont' ('Range Restricted'), which are found no where else in New Zealand	
		Contains several 'Chronically Threatened' bird species including North Island Brown Kiwi, New Zealand pigeon and rifleman	
Representativeness	High	High quality examples of indigenous vegetation on ecosystems that are unique	
Ecological context	High	Park is interconnected with the ecosystems of other forest remnants on the ring plain. It also contains diverse habitats that provide seasonal or core habitat for a wide variety of indigenous species	
Sustainability	Positive	Very large area in excellent vegetative condition. Key ecological processes still influence the site. Under appropriate management it can remain resilient to existing or potential threats	

### **Other Values**

The Egmont National Park also has the following additional values:

- Recreation: The Park is a national and regionally significant recreational area providing a number of recreational experiences including tramping, mountaineering and skiing. The Park is a popular area in terms of number of visitors and there are a number of walking tracks and huts.
- Scientific: The Park contains a variety of uncommon flora and fauna of scientific interest
- Cultural: The Park is of particular cultural and spiritual significance to Māori. The Park contains wahi tapu sites, burial sites and pa sites. There is an extensive history of food gathering by local Iwi in the area.
- Other: The Park is a distinctive part of the Taranaki landscape with regionally significant scenic and amenity values.

### Management threats and response

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

Threats to ecological values	Level of risk	Comment
Pest animals	Medium	Possums, hares, cats, mustelids, rats, rabbits, goats, mice, and hedgehogs
Weeds	Low to Medium	Wild ginger, wandering willie, Chilean rhubarb
Habitat modification	Low	Largely fenced

Site	protection	Yes/No	Description
Α	Public ownership or formal agreement	Yes	Public Conservation Estate (National Park)
В	Regulatory protection by local government	Yes	<ul> <li>Site specific rules apply</li> <li>Taranaki Regional Council rules for wetlands (refer Appendix IIA of the Regional Fresh Water Plan)</li> <li>General regional or district rules might also apply</li> </ul>
C	Active protection	Yes	The Park is 70% fenced Regular and extensive possum control to protect canopy Site specific pest control to protect threatened species



## **Everett Park Scenic Reserve**

At a glance (last updated: February 2006)			
TRC reference:		Ecological district:	Egmont
Other reference:	LD No 68	LENZ environment:	H1.3a
Land tenure:	Crown	Protection status:	A, B, C
GPS:	260914E - 6230850N	Area:	86.7 ha

### Location

The Crown-owned Everett Park is located 8 km east of Inglewood and adjoining the Manganui River. The Reserve is in the Egmont Ecological Region.

### **General description**

Everett Park is a Scenic Reserve administered by the Department of Conservation. It is a large (86.7 ha) remnant of primary kahikatea/tawa forest on relatively flat terrain on the western bank of the Manganui River. This type of forest is now very rare on the Egmont Ring Plain.

### **Ecological features**

### Vegetation

The canopy of Everett Park is predominantly tawa (*Beilschmedia tawa*), which is up to 12 metres in height. There is also some scattered emergent podocarps over 25 metres in height, principally kahikatea (*Dacrycarpus dacrydioides*).

Dominant species in the understorey are wheki (*Dicksonia squarrosa*), soft tree fern (*Cyathea smithii*), *Alseuosmia macrophylla* and terepo (*Streblus heterophylla*). The ground cover comprises numerous ferns such as hen and chicken fern (*Asplenium bulbiferum*), *Cyclosorus pennigerus, Blechnum discolor, Lastreopsis hispida.* 

### Fauna

Notable bird species present in Everett Park include New Zealand pigeon (*Hemiphaga novaeseelandiae*), which is identified as 'Chronically threatened (Gradual Decline)'. Other bird species present include bellbird (*Anthornis melanura*), shining cuckoo (*Chrysococcyx lucidus lucidus*), fantail (*Rhipidura fuliginosa*), kingfisher (*Halcyon sancta vegans*), tomtit (*Petroica*)

*macrocephala*), tui (*Prosthemadera novaeseelandiae*), and grey warbler (*Gerygone igata*).

### **Ecological values**

Ecological values	Rank	Comment
Rarity and distinctiveness	Medium	Contains the 'Chronically Threatened' New Zealand pigeon
Representativeness	High	Contains indigenous vegetation on H1.3a – an 'Acutely Threatened' LENZ environment
Ecological context	Medium	Large remnant linked to Egmont National Park by scattered small remnants and riparian vegetation
Sustainability	Positive	Large area well buffered. 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**

Everett Park is a popular picnic area with two tracks to picnic spots beside the river. An ancient Maori track from some of the inland settlements to Pukerangiora also runs through the length of the Reserve.

### Management threats and response

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

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

Site	protection	Yes/No	Description
Α	Public ownership or formal agreement	Yes	Public Conservation Estate (Scenic Reserve)
В	Regulatory protection by local government	Yes	General regional or district rules might apply
С	Active protection	Yes	Possum control



## **Fraser Road Forest**

At a glance (last updated: February 2006)				
TRC reference:		Ecological district:	Egmont	
Other reference:	STDC SNA 16 SSBI Q21/H011	LENZ environment:	F5.2c	
Land tenure:	Private	Protection status:	B, C	
GPS:	2622900E - 6186200N	Area:	7.9 ha	

### Location

The Fraser Road Forest is located on privately owned land, 4 km north-east of Normanby, in the Egmont Ecological District.

### **General description**

The 7.9 ha Fraser Road Forest comprises of lowland forest and is considered the best of the very few remaining lowland tawa forest remnants on the Stratford Formation. The vegetation types present in this site are now rare and are under-represented in areas that are formally protected.

### **Ecological features**

### Vegetation

The forest at Fraser Road consists primarily of tawa (*Beilschmiedia tawa*) with some titoki (*Alectryon excelsus*), pigeonwood (*Hedycarya arborea*), and mahoe (*Melicytus ramiflorus*).

The forest is in poor condition with canopy gaps and no understorey or ground cover.

### Fauna

Unknown. No specific indigenous fauna species have been recorded for the Fraser Road Remnant Forest.

### **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	Small example of indigenous vegetation on F5.2c – an 'Acutely Threatened' LENZ environment
Ecological context	Low	Isolated forest remnant
Sustainability	Positive	In relatively poor vegetative condition. However, key ecological processes still influence the site. Under appropriate management, it can recover and remain resilient to existing or potential threats

### Management threats and response

Potential and actual threats to the sustainability of the Fraser Road Remnant Forest'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	Wandering willy
Habitat modification	Medium	Unfenced and accessible to livestock

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



# Hawken's Lagoon Conservation Area and Hawken's Swamp

At a glance (last updated: February 2006)				
TRC reference:	0910-0	Ecological district:	Foxton	
Other reference:	STDC SNA 34	LENZ environment:	J4.2a	
	SSBI R/H056, DOC 70361 & 70586			
Land tenure:	Crown (217.6 ha)	Protection status:	A, B	
	Private (4.4 ha)			
GPS:	1. 2653136E – 6150134N	Area:	219.2 ha	
	2. 2655259E - 6350283N			

### Location

The Hawken's Lagoon Conservation Area and Hawken's Swamp comprises of two nearby sites located approximately 6 km south west of Waitotara. Hawken's Lagoon Conservation Area is administered by the Department of Conservation, while Hawken's Swamp is on privately owned land. The sites lie in the Foxton Ecological District.

### **General description**

The Hawken's Lagoon Conservation Area (214.8 ha) is relatively unmodified with high natural values. It contains a dune lake, a large variety of wetland types (riverine, lacustrine and palustine wetland systems), dune slacks and sand dunes and lies adjacent to the foreshore and the river margins of the Waiau Stream and Waitotara River.

The nearby Hawken's Swamp is a small coastal swamp (4.4 ha).

### **Ecological features**

### Vegetation

Of particular importance in the Hawken's Lagoon Conservation Area is the presence of the erect herb Sebaea (*Sebaea ovata*), which is identified as 'Acutely Threatened (Nationally Critical)'. The sedge *Eleocharis neozelandic*, pingao (*Desmoschoenus spiralis*) and sand gunnera (*Gunnera arenaria*), which are all identified as 'Chronically Threatened (Gradual Decline)', are also present. The Lagoon has the largest area of sand gunnera in the region.

Other vegetation present include raupo (*Typha orientalis*), jointed wire rush (*Apodasmia [Leptocarpus] similis*), kapungawha (*Schoenoplectus tabernaemontani*), marram grass (*Ammophila arenaria*), boxthorn (*Lycium ferocissimum*), and pasture. *Limonsella lineata* is also present. The Hawken's Swamp is predominantly fax (*Phormium tenax*) and toetoe (*Cortaderia toetoe*).

### Fauna

Both the Hawken's Lagoon Conservation Area and Hawken's Swamp support a variety of bird life, including the Australasian bittern (*Botarus stellaris poiciloptilus*), which is identified as 'Acutely Threatened (Nationally Endangered)'.

Fernbird (*Bowdlei punctata vealeae*) and New Zealand dabchick (*Poliocephalus poliocephalus*) are also present in the Hawken's Lagoon Conservation Area – both are identified as being nationally 'At Risk (Sparse)'. The lagoon is also an important 'stopover' for migratory wading birds such as the banded dotterel (*Charadrius bicinctus bicinctus*), which has been identified as being 'Chronically Threatened (Gradual Decline)', the royal spoonbill (*Platalea regia*), and for international migrant birds such as the eastern bar-tailed godwit (*Limosa lapponica*). Other birdlife present includes white faced heron (*Ardea novaehollandiae novaehollandiae*), New Zealand scaup (*Mergus australis*), and the grey teal (*Anas gracilis*).

Hawken's Swamp provides habitat for spotless crake (*Porsana tabuensis plumbea*), which is identified as being nationally 'At Risk (Sparse)' and in Taranaki is particularly uncommon. The Waiau Stream margins are also important whitebait spawning sites.

### **Ecological values**

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Contains the 'Acutely Threatened' Sebaea ovata and Australasian bittern, and the regionally uncommon spotless crake
		Also contains 'Chronically Threatened' sedge ( <i>Eleocharis</i> neozelandic), pingao ( <i>Desmoschoenus spiralis</i> ), and sand gunnera ( <i>Gunnera arenaria</i> ), and banded dotterel
Representativeness	High	Contains indigenous vegetation on J4.2a – an 'Acutely Threatened' LENZ environment
Ecological context	High	The site provides core habitat for threatened flora and fauna species and is an important stopover area for other bird species
		Also contains the largest areas of sand gunnera in the region and is an important whitebait spawning ground

Sustainability Positive Large area in relatively good vegetative condition. Key e processes still influence the site. Under appropriate man can remain resilient to existing or potential threats
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### Other values

The Hawken's Lagoon Conservation Area is a popular whitebaiting area. It is also of scientific interest for the sub-fossil totara stumps that lie in the estuary. The area was also a ferry punt landing from early European settlement and the site of the original Waitotara Hotel the 'Rising Sun', which used a cave in the cliff for the cellar. To Maori and Nga Rauru, in particular, the area is of significance for mahinga kai.

### Management threats and response

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

Threats to ecological values	Level of risk	Comment
Pest animals	Low to medium	Possums, cats, mustelids, hedgehogs, and rats
Weeds	Low	
Habitat modification	Low to medium	Threats to the Conservation Area are low as it is formally protected. Hawken's Swamp however is unfenced and grazing poses a threat

Site	Site protection Yes/No		Description
<b>A</b>	Public ownership or formal agreement	Yes	Public conservation estate (Conservation Area and Marginal Strip only)
В	Regulatory protection by local government	Yes	<ul> <li>Site specific rules apply</li> <li>Taranaki Regional Council rules for wetlands (refer Appendix IIA 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> <li>General regional or district rules might also apply</li> </ul>
С	Active protection	No	



## Huatoki Scenic Reserve

At a glance (last updated: February 2006)			
TRC reference:		Ecological district:	Egmont
Other reference:	LD No 107	LENZ environment:	F5.2b
Land tenure:	Crown	Protection status:	А, В
GPS:	2603165E - 6234917N	Area:	16.8 ha

### Location

This Crown owned Huatoki Reserve is located on the outskirts of New Plymouth being only 3 km from the Post Office. The Reserve is in the Egmont Ecological District.

### **General description**

Huatoki Reserve is a Scenic Reserve administered by the Department of Conservation. It is sizeable (16.8 ha) remnant of semi-coastal forest on flat to rolling terrain on the western side of the Huatoki Stream.

### **Ecological features**

### Vegetation

The canopy of the forest is generally up to 20 metres tall and mostly comprises of tawa (*Beilschmiedia tawa*), with pukatea (*Laurelia novaezelandiae*) and rewarewa (*Knightia excelsa*). Tawa is predominant in the drier sites with pukatea in the damp gullies. Titoki (*Alectryon excelsus*) and kohekohe (*Dysoxylum spetabile*) are also common in places while a large patch of puriri (*Vitex lucens*) and karaka (*Corynocarpus laevigatus*) occur on the north-eastern boundary.

Common understorey species include hangehange (*Geniostoma rupestre* var. *ligustrifolium*), kawakawa (*Macropiper excelsum*), and nikau (*Rhopalostylis sapida*).

King fern (*Marattia salicina*) found here is identified as 'Chronically Threatened (Serious Decline)' nationally and is known from only a few scattered coastal and semi-coastal locations in north Taranaki.

### Fauna

New Zealand pigeon (*Hemiphaga novaeseelandiae*), which is identified as being in 'Gradual Decline', is present in the area.

### **Ecological values**

Ecological values	Rank	Comment
Rarity and distinctiveness	Medium	Contains the regionally uncommon and 'Chronically Threatened' king fern
		Also contains the 'Chronically Threatened' New Zealand pigeon
Representativeness	High	Contains indigenous vegetation on F5.2b – an 'Acutely Threatened' LENZ environment
Ecological context	Medium	Gully systems throughout locality support native species
Sustainability	high	Ecological processes still influence the site. Under appropriate management it can remain resilient to existing or potential threats

#### **Other values**

Popular for recreation with two walking tracks making a loop track through the bush.

### Management threats and response

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

Threats to ecological values	Level of risk	Comment
Pest animals	Low - medium	Possums, cats, mustlids, and rats
Weeds	Medium - high	Wandering willy along banks of Huatoki Stream
Habitat modification	Low	A few"natives" which do not naturally occur in the reserve have been planted near the northern boundary

Site	Site protection Ye		Description
Α	Public ownership or formal agreement	Yes	Public Conservation Estate (Scenic Reserve)
В	Regulatory protection by local government	Yes	General regional or district rules might apply
С	Active protection	No	



## Huiakama Lagoon

At a glance	At a glance (last updated: February 2006)			
TRC reference:	1007-0	Ecological district:	Matemateaonga	
Other reference:		LENZ environment:	F7.2a (1.1 ha)	
			F5.2a (2.5 ha)	
Land tenure:	Private	Protection status:	А, В	
GPS:	2645452E - 6215656N	Area:	3.7 ha	

### Location

The Huiakama Lagoon is located on privately owned land, approximately 26 km north-east of Stratford. The Lagoon lies in the Matemateaonga Ecological District.

### **General description**

The Huiakama Lagoon covers 3.7 ha and is mostly located on an area of previously cleared land that has now reverted to wetland. The Lagoon drains into the Mangaotuku Stream.

### **Ecological features**

### Vegetation

Vegetation within the Lagoon includes rushes (*Juncus* spp.), sedges (*Carex* spp.) and some kahikatea (*Dacrycarpus dacrydioides*).

### Fauna

The Lagoon provides habitat for spotless crake (*Porsana tabuensis plumbea*), which is identified as 'At Risk (Sparse)' nationally and is particularly uncommon in Taranaki.

### **Ecological values**

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Contain the 'At Risk' spotless crake (sparse), which particularly uncommon in Taranaki
Representativeness	High	Small areas of of indigenous vegetation on 'Acutely Threatened' (F5.2a) and 'At Risk' (F7.2a) LENZ environments
Ecological context	Medium	Provides core habitat for the threatened and regionally uncommon spotless crake .The Lagoon also drains into and is interconnected with the Mangaotuku Stream
Sustainability	Positive	In fair 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 Huiakama Lagoon's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Medium to high	Possums, cats, mustelids, goats, hedgehogs, and rats
Weeds	Medium to high	Willows are abundant
Habitat modification	Medium	Previously cleared but with now well advanced regeneration

Site	Site protection Yes/No		Description
Α	Public ownership or formal agreement	No	
В	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
С	Active protection	Yes	Taranaki Regional Council assisted willow control Fenced



### **Hutiwai Conservation Area**

At a glance (last updated: February 2006)				
TRC reference:	0844-0	Ecological district:	North Taranaki	
Other reference:	DOC 70109	LENZ environment:	C1.2a (85.9 ha)	
			C1.3a (0.4 ha)	
			D2.1a (127.0 ha)	
			D2.3a (61.5 ha)	
			D2.3b (170.0 ha)	
			D2.3c (481.3 ha)	
			F1.1b (8,234.5 ha)	
			F1.1d (1,266.4 ha)	
			F5.2a (0.3 ha)	
			F7.2a (269.7 ha)	
Land tenure:	Crown	Protection status:	A, B, C	
GPS:	2653073E - 6262399N	Area:	10,696.9 ha	

### Location

The Crown owned Hutiwai Conservation Area is located 15 km south east of Mokau. It lies in the North Taranaki Ecological District.

### **General description**

The Hutiwai Conservation Area is a large area (10,696.9 ha) administered by the Department of Conservation. It comprises of wetland and lowland forest that extend from the coast to the Waitaanga Plateau.

The Conservation Area is part of a continuous forest tract. It is made up of easy spurs dropping off to steep sided creeks in the north, while the swampy section is to the south. The wetland itself (239 ha) is comprised of alluvial terraces of the Hutiwai Stream. The site is significant as the largest area of unmodified alluvial terrace vegetation in North Taranaki.

### **Ecological features**

### Vegetation

Wetland areas in the Hutiwai Conservation Area contain pukatea (*Laurelia novaezelandiae*) – kahikatea (*Dacrycarpus dacrydioides*) – swamp sedge

(*Carex virgata*), tussock treeland, tussockland, kahikatea – rata (*Metrosideros robusta*) – pukatea forest, swamp pukatea – kahikatea forest and kahikatea forest.

The hillslopes have a mosaic of tawa forest and hard beech forest which is the most extensive in the district. There are small stands of very large mature kanuka which are rare elsewhere in the district. The catchment of the Mangaone Stream is intact with pure hard beech surrounding a tongue of podocarp rich pukatea/kamahi-tawa froest.

### Fauna

The 'Acutely Threatened (Nationally Endangered)' kaka (*Nestor meridionalis*) and the nationally 'At Risk (Sparse)' but fernbird (*Bowdleria punctata vealeae*), are present in the Hutiwai Conservation Area. Fernbird are particularly uncommon in Taranaki.

Other notable birdlife in the area includes the North Island brown kiwi (*Apteryx mantelli*), which is identified as 'Chronically Threatened (Serious Decline)'.The valley is also significant breeding area for native fish, particularly the banded kokupu (*Galaxia fasciatus*).

### **Ecological values**

Ecological values	Rank	Comment	
Rarity and High distinctiveness		Contains the 'Acutely Threatened' kaka and the regionally uncommon and 'At Risk' fernbird	
		Also contains the 'Chronically Threatened' North Island brown kiwi	
Representativeness	High	High quality large area of indigenous vegetation on 'Acutely Threatened' (C1.2a, C1.3a, F5.2a); 'At Risk' (D2.3a, F7.2a) and 'Underprotected' (D2.3c) LENZ environments	
Ecological context	High	The largest area of unmodified alluvial terrace vegetation in North Taranaki. It provides core habitat for threatened indigenous birds is a significant breeding site for native fish. Part of continuum of forest extending from the coast to the Waitaanga Plateau	
Sustainability Positive		Large area well buffered. Key ecological processes still influence the site. Under appropriate management it can remain resilient to existing or potential threats	

### **Other Values**

The Hutiwai Conservation Area also has recreational value. It is a popular area for hunters and possum trappers.

**Management threats and response** Potential and actual threats to the sustainability of the Hutiwai Conservation Area's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Medium	Possums, cats, goats, mustelids, and rats
Weeds	Medium	This site contains exotic water plants, including swamp lily (Ottelia ovealifolia) and ribbonweed (Vallisneria spp.)
Habitat modification	Low	

Site	Site protection Yes/No		Description
A	Public ownership or formal agreement	Yes	Public Conservation Estate (Conservation Area)
В	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
С	Active protection	Yes	North-east part of the Conservation Area is fenced Department of Conservation possum control programme Some recreational hunting and possum trapping



### Ihupuku Swamp Wildlife Management Reserve

At a glance (last updated: February 2006)				
TRC reference:	0906-0	Ecological district:	Manawatu plains	
Other reference:	DOC 70229	LENZ environment:	A5.3a (41.7 ha)	
			C2.1a (0.7 ha)	
			C3.2d (4.5 ha)	
			F5.2c (3.0 ha)	
Land tenure:	Crown	Protection status:	A, B, C	
GPS:	2650206E - 6156511N	Area:	49.9 ha	

### Location

The Crown-owned Ihupuku Swamp is located 1 km south of Waverley. It lies in the Manawatu Plains Ecological District.

### **General description**

The Ihupuku Swamp is a large (49.9 ha) dune wetland system, consisting of numerous interconnecting small arms with the occasional larger water body. The swamp lies in the shallow valleys of the uplifted marine terraces of the Manawatu Plains Ecological District, and is dammed by dunes from the Foxton Ecological District. The area, which is administered by the Department of Conservation, was once used as a water reservoir for iron sand works in the area. The swamp contains a diverse range of native, endemic and exotic plants and is a relict of now cleared forest in the south Taranaki – Wanganui lowlands.

### **Ecological features**

### Vegetation

Ihupuku Swamp has 94 species of indigenous vascular plants and 57 introduced vascular plants. Abundant species in the wetland include flax (*Phormium tenax*), swamp coprosma (*Coprosma tenuicaulis*), and cabbage trees (*Cordyline australis*).

Of particular significance is the presence of the green hood orchid (*Pterostylis micromega*), which is identified as 'Acutely Threatened (Nationally Critical)'. Annual Department of Conservation surveys of the

swamp have found the orchid in areas of swampy pasture enclosed by swamp scrub and tall flax. However, these surveys show that the numbers of these orchids are declining.

Also present is the endemic swamp buttercup (*Ranunculus macropus*), which is identified as 'Chronically Threatened (Gradual Decline)'. Another unique feature of the swamp is the presence of the fern *Tmesipteris* on the bases of purei/makura (*Carex secta*) is found in the swamp – this has not been recorded in the region before. The Ihupuku Swamp is also near the southern limit for *Clematis quadribacteolata* in the North Island. Jointed twig-rush (*Baumea articulata*), burr-reed (*Sparganium subglobosum*) and swamp millet (*Isachne globosa*), are also present.

### Fauna

Birdlife present in the Ihupuku Swamp include the fernbird (*Bowdleria punctata vealeae*) and the spotless crake (*Porzana tabuensis plumbea*), which are identified as 'At Risk (Sparse)'. The fernbird and spotless crake are particularly uncommon in the Taranaki region.

### **Ecological values**

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Contains the 'Acutely Threatened' green hood orchid ( <i>Pterostylis micromega</i> ). and the regionally uncommon and 'At Risk' fernbird and spotless crake
		Also contains the 'Chronically Threatened' swamp buttercup (Ranunculus macropus)
Representativeness	High	Contains indigenous vegetation on 'Acutely Threatened' (A5.3a, C2.1a, C3.2d and F5.2c) LENZ environments
Ecological context	High	Provides connectivity with other Key Native Ecosystems located close by (Lake Okoia, Waitotara and Hawken's Lagoon Conservation Area, Lake Herengawe, Lake Oturi and Lake Waiau Wildlife Management 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 the Ihupuku Swamp Wildlife Management Reserve's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Low to medium	Possums, cats, goats, pigs, mustelids, and rats
Weeds	Medium	Hemp agrimony is commonly and locally abundant in the swamp. Also Japanese honeysuckle, gorse, crack willow, blackberry and old man's beard
Habitat modification	Medium	The wetland is surrounded by farmland and is not fenced

Site	Site protection		Description
Α	Public ownership or formal agreement	Yes	Public Conservation Estate (Wildlife Management Reserve)
В	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
С	Active protection	Yes	Gorse has been sprayed



### Julian's Pond

At a glance	At a glance (last updated: February 2006)			
TRC reference:	0937-0	Ecological district:	Egmont	
	1232-0			
Other reference:	QEII 5/06/109	LENZ environment:	F5.2c (3.7 ha)	
			J4.2a (1.1 ha)	
Land tenure:	Private	Protection status:	A, B, C	
GPS:	2586938E - 6190132N	Area:	4.8 ha	

### Location

Julian's Pond is located on privately owned land, approximately 5 km southeast of Opunake. The site is in the Egmont Ecological District.

### **General description**

Julian's Pond is an ephemeral wetland, roughly circular in shape and covers 4.8 ha. No streams enter the lake and water levels fluctuate seasonally. When full, a water outlet drains the lake via a small waterfall over the cliff. The site contains a large and diverse range of native flora and includes the ecologically important 'fennel-leaved pond weed'. The site provides habitat for a large variety of native and introduced wetland bird species.

### **Ecological features**

### Vegetation

The margins of Julian's Pond are dominated by exotic grasses. Some native semi-aquatic species, sedges, vines, herbs and other planted species are also present.

The lake perimeter is dominated by a band of mercer grass (*Paspalum distichum*).Growing among the mercer grass are creeping bent (*Agrostis stolonifera*), New Zealand willow weed (*Polygonum salicifolium*), beggar's ticks (*Bidens frondosa*) and *Carex* species.

Native turf species occur at the lower edge of the mercer grass zone on wet sand or silt or in very shallow (<50mm) water. These species include water milfoil (*Myriophyllum propinquum*) and *Glossostigma elatinoides*. The aquatic fennel-leaved pond weed (*Potamogeton pectinatus*), which is identified as 'Chronically Threatened (Gradual Decline)', is present.

Planted species around the lake include harakeke (*Phormium tenax*), karo (*Pittosporum crassifolium*), pohutukawa (*Metrosideros excelsa*), and akiraho (*Olearia paniculata*). Sedges include *Carex secta*, *Carex virgata*, and other *Carex* species.

Other common plants are manihi/red pondweed (*Potamogeton cheesemanii*), pink bindweed (*Calystegia sepium*), pohuehue (*Muehlenbeckia complexa*), *Glossostigma elatinoides*, and water milfoil (*Myriophyllum propinquum*).

The native aquatic grass *Amphibromus fluitans*, and a species of the dicotyledonous herb *Limosella*, were identified in Julian's Pond in 1964 and 1972. These are 'Acutely Threatened (Nationally Endangered)' flora species, but there have been no recent sightings of these plants in the wetland.

### Fauna

A large number of bird species are present at Julian's Pond. These include the grey duck (*Anas superciliosa*), which is identified as 'Acutely Threatened (Nationally Endangered)'. Other notable fauna species include New Zealand dabchick (*Poliocephalus rufopectus*) and black shag (*Phalacrocorax carbo*), both of which are identified as 'At Risk (Sparse)'.

Other birds present or which visit the site include grey teal (*Anas gracilis*), New Zealand scaup (*Aythya novaeseelandiae*), black fronted dotterel (*Charadrius melanops*), little shag (*Phalacrocorax melanoleucos*), white faced heron (*Ardea novaehollandiae*), spur winged plover (*Vanellus miles*), southern black-backed gull (*Larus dominicanus*), paradise shelduck (*Tadorna variegata*), mallard (*Anas platyrhynchos*), Australasian shoveler (*Anas rhynchotis*), pukeko (*Porphyrio porphyrio*), pied stilt (*Himantopus himantopus*), Australasian harrier (*Circus approximans*), welcome swallow (*Hirundo ahitica*), black swan (*Cygnus atratus*), Canada geese (*Branta canadensis*), and cattle egrets (*Bubulcus ibis*).

There have also been recent sightings of royal spoonbills (*Platalea regia*).

### **Ecological values**

Ecological values	Bank	Comment
Rarity and	High	Contains the 'Acutely Threatened' grey duck
distinctiveness		Also contains the 'Chronically Threatened' fennel - leaved pond weed, and the 'At Risk' New Zealand dabchick and black shag
Representativeness	High	Contains indigenous vegetation on 'Acutely Threatened' (F5.2c, J4.2a) LENZ environments

Ecological context High		Relatively small ephemeral wetland that is uncommon in Taranaki. Provides core habitat for threatened flora and fauna as well as 'staging post' for migratory birds	
Sustainability Positive		In relatively good vegetative condition. Key ecological processes 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 Julian's Pond'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	Medium to high	Upshore from the lake edge is <i>convolvulous</i> , blackberry, and creeping buttercup
Habitat modification Medium		It was once used as a secondary pond for dairy shed effluent treatment, therefore some enrichment and past modification of water levels

Site	Site protection Yes/N		Description
A	Public ownership or formal agreement	Yes	QEII Covenant covering the whole site
В	Regulatory protection by local government	Yes	Site specific rules apply – Taranaki Regional Council rules for wetlands (refer Appendix IIBof the Regional Fresh Water Plan) General regional or district rules might also apply
С	Active protection	Yes	The lake is fenced, margins planted Self-help Possum Control Programme



### **Junction Road**

At a glance (last updated: February 2006)			
TRC reference:		Ecological district:	North Taranaki
Other reference:	NPDC SNA 12	LENZ environment:	F5.2a (2.7 ha)
			F7.2a (6.5 ha)
Land tenure:	Private	Protection status:	В
GPS:	2632447E - 6229481N	Area:	9.2 ha

### Location

The Junction Road site is located on privately owned land, 18 km east of Inglewood. The site is within the North Taranaki Ecological District.

### **General description**

The Junction Road site covers 9.2 ha and is located within a large bend of the Taramoukou River just inside the Taranaki boundary. The small forest remnant is one of the few natural areas of mixed podocarp forest left in North Taranaki. It complements public conservation land and other Key Native Ecosystems in the vicinity (QEII 5/06/45 lies 2.8 km to the east and Taramoukou Conservation Area lies 3.8 km north-west).

### **Ecological features**

### Vegetation

This forest remnant is typical of the forests that would have once covered the gentle hill country and broad alluvial flats of the southern part of the ecological district.

The forest canopy is predominantly kahikatea (*Dacrycarpus dacrydioides*), matai (*Prumnopitys taxifolia*) and rimu (*Dacrydium cupressinum*) forest on the alluvial terrace. On the hill slopes tawa (*Beilschmiedia tawa*), rewarewa (*Knightia excelsa*) and mamaku (*Cyathea medullaris*) forest predominate.

### Fauna

Unknown. No specific indigenous fauna species have been recorded for the Junction Road site.

### **Ecological values**

Ecological values	Rank	Comment
Rarity and distinctiveness	Low	Not known to contain any 'Acutely Threatened' species or species uncommon to Taranaki
Representativeness	High	Contains indigenous vegetation on 'Acutely Threatened' (F5.2a) and 'At Risk' (F7.2a) LENZ environments
Ecological context	Medium	Near similar areas in the public conservation estate and other Key Native Ecosystems
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 Junction Road's ecological values are as follows:

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

Site	Site protection		Description
Α	Public ownership or formal agreement	No	
В	Regulatory protection by local government	Yes	<ul> <li>Site specific rules apply</li> <li>New Plymouth District Council rules for Significant Natural Areas (refer Appendix 21 of the District Plan)</li> <li>General regional or district rules might also apply</li> </ul>
С	Active protection		Not known



## Kahu (Waitaanga Plateau)

At a glance (last updated: February 2006)			
TRC reference:		Ecological district:	North Taranaki
Other reference:	NPDC SNA 5	LENZ environment:	C1.1c (8.9 ha)
			D2.1a (3.5 ha)
			D2.3a (6.7 ha)
			D2.3b (5.5 ha)
			F1.1b (313.7 ha)
			F7.2a (248.6 ha)
			F7.2b (18.9 ha)
Land tenure:	Private	Protection status:	В
GPS:	2592032E - 6210354N	Area:	1,529.9 ha

### Location

Kahu (Waitaanga Plateau) site is located on privately owned land, 15.3 km south-east of Mokau. The site lies in the North Taranaki Ecological District.

### **General description**

Kahu (Waitaanga Plateau) is a very large 1,529.9 ha area of primary and regenerating secondary lowland forest and shrubland covering the broad crest of the Waitaanga Plateau. Forestry clearance has occurred in the past and the site contains an extensive mire of induced kahikatea/manuka – tussock - shrubland forest and kamahi – quintinia – toro forest. The site is near the Mohakatino Conservation Area.

### **Ecological features**

### Vegetation

On the gentle terrain of the Kahu (Waitaanga Plateau) site, rimu (*Dacrydium cupressinum*) rich primary forest, tawa (*Beilschmiedia tawa*) – kamahi (*Weinmannia racemosa*) forest, kamahi – quintinia (*Quintinia serrata*) – toro (*Myrsine salicina*) forest and hard beech (*Nothofagus truncata*) forest is present with epiphytes such as rata (*Metrosideros* spp.). The hard beech forest on gentle terrain is unique to the ecological district.

On the ridges and hillslopes, the site also contains remnant pockets of silver beech - the northern limit of silver beech (*Nothofagus menziesii*) on the

western side of the North Island which appears to be a relic of a former more widespread distribution in the Taranaki region. There is also an extensive mire of induced kahikatea (*Dacrycarpus dacrydioides*), manuka (*Leptospermum scoparium*), and *Gahnia xanthocarpa* tussock-shrubland mire.

### Fauna

The Kahu (Waitaanga Plateau) site contains a wide variety of birdlife. The presence of fernbird (*Bowdleria punctata vealeae*) is suspected.

### **Ecological values**

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Contain a significant stand of silver beech which is at its national distributional limit
Representativeness	Medium	Contains indigenous vegetation on 'At Risk' (D2.3a and F7.2a) LENZ environments
Ecological context	High	Adjoins Mohakatino Conservation Area and is part of a unique forest continuum that extends from the coast and inland to Waitaanga Forest
Sustainability Positive		In good vegetative condition and excellent regeneration is occurring. 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 Kahu (Waitaanga Plateau) site ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Medium to high	Possums, cats, mustelids, and rats
Weeds	Low to medium	Blackberry, ragwort, foxglove
Habitat modification	Medium	Potential risk of logging

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



## Kahui Road Wetland

At a glance	At a glance (last updated: February 2006)			
TRC reference:	0929-0	Ecological district:	Egmont	
Other reference:	STDC SNA 7	LENZ environment:	F5.3b (1.8 ha)	
	QEII 5/06/115		H1.3b (5.2 ha)	
	SSBI P20/H023			
Land tenure:	Private	Protection status:	A, B, C	
GPS:	2592032E - 6210354N	Area:	7.1 ha	

### Location

The Kahui Road Wetland is located on privately owned land, approximately 18 km north-east of Opunake. The wetland is located in the Egmont Ecological District.

### **General description**

The Kahui Road Wetland is a small area (7.1 ha) of regenerating secondary lowland forest, located on a Maero young debris flow. The palustrine wetland adjoins Egmont National Park and is made up of poorly drained soils within hummocky topography. The site contains a mosaic of swamp and drier variations of kahikatea forest, and scrub that provide habitat for a range of native birds.

### **Ecological features**

#### Vegetation

The Kahui Road Wetland contains a large stand of kahikatea forest, which is a rare forest type and is not found in the adjacent Egmont National Park.

The forest canopy is predominantly kahikatea (*Dacrycarpus dacrydioides*) with occasional swamp maire (*Syzgium maire*), kamahi (*Weinmannia racemosa*), rimu (*Dacrydium cupressinum*), lancewood (*Pseudopanax crassifolius*), totara (*Podocarpus totara*), rewarewa (*Knightia excelsa*), pate/seven finger (*Schefflera digitata*), and mahoe (*Melicytus ramiflorus*) with epiphytes, such as rata (*Metrosideros* spp.).

There is a small area of manuka (*Leptospermum scoparium*) and kanuka (*Kunzea ericoides var. ericoides*) scrub with *Coprosma grandifolia*,

*C.robusta, and C. tenuifolia,* rushes (*Juncus* spp.), sedges (*Carex dissita*), and herbs such as *Pratia angulata* and *Leptinella*.

#### Fauna

The Kahui Road Wetland is important as a food source for birds due to the high number of fruiting trees. Birds present at the site include New Zealand pigeon (*Hemiphaga novaeseelandiae*), which is identified as 'Chronically Threatened (Gradual Decline). Other native birds present include tui (*Prosthermadera novaeseelandiae*), fantail (*Rhipidura fulginosa*), grey warbler (*Gerygone igata*), pukeko (*Porphyrio porphyrio*), and bellbird (*Anthornis melanura*).

### **Ecological values**

Ecological values	Rank	Comment
Rarity and distinctiveness	Medium	Contains the 'Chronically Threathened' New Zealand pigeon
Representativeness	Medium	Contains indigenous vegetation on H1.3b – an 'Underprotected' LENZ environment
Ecological context	High	The wetland adjoins and is interconnected with the Egmont National Park's ecosystem. Different vegetation type extending habitats and providing linkage to lower altitude forests
Sustainability	Positive	In good vegetative condition and excellent regeneration is occurring. Key ecological processes 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 Kahui Road Wetland's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Low to medium	Possums, cats, rabbits, mustelids, and rats
Weeds	Low to medium	Blackberry, ragwort, foxglove
Habitat modification	Low	Site is fenced and protected

Site	protection	Yes/No	Description
A	Public ownership or formal agreement	Yes	QEII Covenant
В	Regulatory protection by	Yes	Site specific rules apply
	local government	local government	<ul> <li>Taranaki Regional Council rules for wetlands (refer Appendix III of the Regional Fresh Water Plan)</li> </ul>
			<ul> <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
С	Active protection	Yes	Completely fenced Self-help Possum Control Programme



### Kaipikari Road Forest Remnants

At a glance	At a glance (last updated: February 2006)				
TRC reference:	0566-0, 1077-0, 1073-0, 1074-0, 1082-0, 1083-0, 1084-0	Ecological district:	North Taranaki		
Other reference:	QEII 5/06/054, QEII 5/06/061 – 062A, 5/06/063 – 065, QEII 5/06/179 NPDC – ID30923, ID30927, ID63547, ID63947, ID65135	LENZ environment:	F1.1b (27.8 ha) F5.2a (16.1 ha) F7.2a (1.9 ha)		
Land tenure:	Private	Protection status:	A, B, C		
GPS:	1. 2631273E – 6242329N 2. 2631000E – 6241500N	Area: Total	1 0.4 ha 2. 45.4 ha 45.8 ha		

### Location

The Kaipikari Road Forest Remnants are on privately owned land, 2.3 km south of Urenui. The sites lie in the North Taranaki Ecological District.

### **General description**

The Kaipikari Road Forest Remnants comprise of two sites covering seven QEII covenanted areas (QEII 5/06/054, QEII 5/06/061, QEII 5/06/062A, QEII 5/06/063, QEII 5/06/064, QEII 5/06/065 and QEII 5/06/179).

The smallest remnant (QEII Covenant 5/06/179) comprises of 0.4 ha of lowland secondary tawa – pigeonwood – rewarewa forest. The vegetation is typical of that found in the area. Topography is flat to rolling. The area has been logged in the past, but the canopy is still in good condition.

The larger remnant (covering QEII 5/06/054, QEII 5/06/061, QEII 5/06/062A, QEII 5/06/063, QEII 5/06/064 and QEII 5/06/065) comprises of a relatively large (45 ha) semi-coastal riparian tawa forest, located on a very steep sided gully of the Kakapo Stream. Due to the steep topography the area has not been grazed heavily and the undergrowth is healthy.

These covenants are part of a whole series of covenants in this locality that were part of the Urenui Water supply catchment. A number of additional forest and wetland covenants and protected areas are also located nearby.

### **Ecological features**

#### Vegetation

Vegetation in the smaller remnant (QEII Covenant 5/06/179) is predominantly tawa (*Beilschmiedia tawa*), with some rimu (*Dacrydium cupressinum*), emergent over a canopy of pigeonwood (*Hedycarya arborea*), and rewarewa (*Knightia excelsa*).

Kawakawa (*Macropiper excelsum*), lancewood (*Pseudopanax crassifolium*), lacebark (*Hoheria* species), mahoe (*Melicytus ramiflorus*), and karamu (*Coprosma robusta*) are present in the understorey. Groundcover consists of ferns (*Blechnum* spp.) with good seedlings further in under the forest canopy.

Canopy vegetation within the larger remnant is predominantly tawa, with some mahoe, hinau (*Elaeocarpus dentatus*), rewarewa, and puriri (*Vitex lucens*). At the top of the slope species such as miro (*Prumnopitys ferruginea*), rimu, matai (*Prumnopitys taxifolia*) and mapou (*Myrsine australis*), are important canopy components.

The understorey contains mostly kohekohe (*Dysoxylum spectabile*), supplejack (*Ripogonum scandens*) and nikau (*Rhopalostylis sapida*). Kawakawa (*Macropiper excelsum*), hangehange (*Geniostoma rupestre* var. *ligustrifolium*), wheki (*Dicksonia squarrosa*) and kiekie (*Freycinetia baueriana* subsp. *banksii*) are also common. Near the base of the slope parataniwha (*Elatostema rugosum*) is the dominant groundcover. Other groundcover species common throughout the area include lace fern (*Blechnum chambersii*), thread fern (*B. filiforme*), hooked sedge (*Uncinia* sp.), and hen and chicken fern (*Asplenium bulbiferum*).

Of particular note is the presence of a significant colony of king fern (*Marattia salicina*), which exists near the base of the slope in the largest remnant site and extends about one-third of the way up. This fern is identified as 'Chronically Threatened (Serious Decline)' nationally but is regionally distinctive as it is known to inhabit only a few scattered coastal and semi-coastal locations in north Taranaki.

### Fauna

The usual forest birds have been identified in these covenant areas and include New Zealand pigeon (*Hemiphaga novaeseelandiae*), which is identified as 'Chronically Threatened (Gradual Decline)' nationally. Bellbird (*Anthornis melanura melanura*), silvereye (*Zosterops lateralis*) and tomtit (*Petroica macrocephala*) are also present.

### **Ecological values**

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Regionally distinctive in that it contains a significant colony of the regionally uncommon and 'Chronically Threatened' king fern. Also contains the 'Chronically Threatened' New Zealand pigeon
Representativeness	High	High quality example of indigenous vegetation on 'Acutely Threatened' (F5.2a) and 'At Risk' (F7.2a) LENZ environments
Ecological context	Medium	Close to covenants and other forest remnants in this locality
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 Kaipikari Road Forest Remnants' 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. Fenced in part. Some stock grazing though relatively confined

Site	protection	Yes/No	Description
Α	Public ownership or formal agreement	Yes	QEII Covenants covering the entire site
В	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
С	Active protection	Yes	Fencing



### Kawau Pa Historic Reserve

At a glance	At a glance (last updated: February 2006)			
TRC reference:		Ecological district:	North Taranaki	
Other reference:	LD 14A DOC 70432	LENZ environment:	F5.2b	
Land tenure:	Crown	Protection status:	А	
GPS:	2649155E - 6269668N	Area:	1.0 ha	

### Location

The Crown owned Kawau Pa Historic Reserve is located on a small island, 40 km north-east of Waitara, close to State Highway 3. The island lies in the North Taranaki Ecological District.

### **General description**

Kawau Pa Historic Reserve is administered by the Department of Conservation. The Reserve is a small (1.0 ha) offshore island separated by a narrow sea channel from another Key Native Ecosystem – Te Puia, which lies on the mainland. The site is covered in vigorously regenerating low growing wind-shorn coastal scrub and forest.

### **Ecological features**

### Vegetation

The Kawau Pa Historic Reserve comprises of karaka/mapou-hangehange-flax low (less than 5 metre canopy height) scrub-forest.

Flax (*Phormium tenax*) up to 2 metres high is the canopy along the western edges which are fully exposed to the salt laden winds. Behind the flax mapou (*Myrsine australis*) and hangehange (*Geniostoma rupestre* var. *ligustrifolium*) become dominant with occasional karaka (*Corynocarpus laevigatus*), *Olearia albida*, rewarewa (*Knightia excelsa*), five finger (*Pseudopanax arboreus*), and wharangi (*Melicope ternata*).

The sheer sandstone cliffs surrounding the island are generally devoid of vegetation for at least 5-6 metres above the beach. Coastal herbs such as sea celery, sea primrose, *Lobelia anceps*, and *Selliera radicans* occur in crevices. At the top of the cliff are rengarenga (*Arthropodium cirrhatum*),

flax (*Phormium tenax*), *Linum monogynum*, New Zealand spinach (*Tetragonia trigyna*).

The presence of *Olearia albida* and the coastal form of the fern *Asplenium flaccidum* are noteworthy being very uncommon in the North Taranaki Ecological District. *Olearia albida* is near the southern limit for New Zealand at this site

### Fauna

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

### **Ecological values**

Ecological values	Rank	Comment
Rarity and distinctiveness	Medium	Presence of Olearia albida and coastal form of Asplenium flaccidum uncommon in district
Representativeness	High	Contains indigenous vegetation on F5.2b – an 'Acutely Threatened' LENZ environment
Ecological context	Medium	Coastal forest adjoining Te Puia; Kuwhatahi, and scattered vegetation along cliffs
Sustainability	Positive	Key ecological processes still influence the site. Appropriate management will ensure resilience to existing and potential threats.

### Other values

Te Kawau Pa was a pa site of Ngati Tama and is reputed to contain a large number of graves. The site being near State Highway 3 also has high scenic landscape values.

**Management threats and response** Potential and actual threats to the sustainability of Te Kawau Pa Historic Reserve's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Low -med	Possums, cats, mustlids, and rats
Weeds	Low-med	
Habitat modification	Low	

Site	protection	Yes/No	Description
Α	Public ownership or formal agreement	Yes	Public Conservation Estate (Historic Reserve)
В	Regulatory protection by local government	Yes	General regional or district rules might apply
С	Active protection		



## **Kaweora Road Forest**

At a glance (last updated: February 2006)				
TRC reference:	0936-0	Ecological district:	Egmont	
Other reference:	STDC SNA 4	LENZ environment:	F5.2a	
	QEII 5/06/111			
	SSBI P20/H007			
Land tenure:	Private	Protection status:	A, B, C	
GPS:	2592400E - 6201000N	Area:	107.6 ha	

### Location

The Kaweora Road Forest is located on private land, 10 km north-east of Opunake. The site is in the Egmont Ecological District.

### **General description**

This 107.6 ha forest is a large remnant of semiswamp forest located on lahar deposits. It consists of a range of indigenous vegetation types associated with the topography and drainage of the lahar deposits. It is the largest remnant of mosaic forest and swamp, once typical of lahar deposits, in Taranaki.

### **Ecological features**

### Vegetation

Secondary forest of kahikatea (*Dacrycarpus dacrydioides*), swamp maire (*Syzgium maire*), kamahi (*Weinmannia racemosa*), and pukatea (*Laurelia novae zelandiae*) are found on the relative wet intermound areas. Pukatea is limited in occurrence above approximately 250 metres above sea level and is therefore less abundant in the upper part of the remnant.

Kamahi and tawa (*Beilschmiedia tawa*) are the canopy dominants on the drier lahar mound areas.

On the south-eastern edge of the remnant is a small area of lancewoodkamahi-swamp maire/*Coprosma tenuicaulis* shrubland swamp with *Carex* species, raupo (*Typha orientalis*) and pond weed (*Potamogeton* sp.), where there are pools of water.

The area of forest above Wiremu Road is drier in nature and in the northeastern part of the forest the vegetation is at an earlier stage of succession with kamahi prominent in the canopy.

### Fauna

North Island brown kiwi (*Apteryx australis mantelli*), which are identified as 'Chronically Threatened (Serious Decline)' and New Zealand pigeon (*Hemiphaga novaeseelandiae*), which are identified as in 'Gradual Decline', are present in the Kaweora Road Forest. Other birdlife present include tui (*Prosthermadera novaeseelandiae*).

### **Ecological values**

<b>&gt;</b>			
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 F5.2a – an 'Acutely Threatened' LENZ environment	
Ecological context	High	Largest remnant of mosaic forest and swamp typical of lahar deposits in Taranaki close to Wiremu Road wetland and Egmont National Park.	
Sustainability	Positive	Large area in relatively good and 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 the Kaweora Road Forest's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Low	Possums, cats, mustelids, hedgehogs, and rats
Weeds	Low	
Habitat modification	Low	The site is fenced and is mostly covered by a QEII covenant. While some drainage has been carried out in the south-western part of the site, the area is now recovering

Site	protection	Yes/No	Description
Α	Public ownership or formal agreement	Yes	In part: Mostly covered by a QEII covenant (1 of 2 land owners)
в	Regulatory protection by	Yes	Site specific rules apply
	local government		<ul> <li>Taranaki Regional Council rules for wetlands (refer Appendix III of the Regional Fresh Water Plan)</li> </ul>
			<ul> <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
С	Active protection	Yes	Fenced Self-help Possum Control Programme



### Kuwhatahi

At a glance (last updated: February 2006)				
TRC reference:		Ecological district:	North Taranaki	
Other reference:	NPDC SNA 3	LENZ environment:	F1.1b	
Land tenure:	Private	Protection status:	A, B, C	
GPS:	2650881E - 6269512N	Area:	1,134.6 ha	

### Location

The Kuwhatahi site is located on privately owned land, 4 km south of Mokau. The site lies in the North Taranaki Ecological District.

### **General description**

The Kuwhatahi site is a large (1,134.6 ha) area of predominantly west-facing coastal and semi coastal hillslope forest and scrub, centred around the steeply dissected Kuwhatahi catchment. The vegetation is in excellent condition and contains a number of rare and regionally notable flora species. The site includes the only truly coastal hard beech forest in the North Taranaki Ecological District and is one of the few such stands in the North Island.

Along with the semi coastal forests of the Rapanui (headwaters) site and the lowland forests of Huitiwai, Kuwhatahi is part of 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 Kuwhatahi site is predominantly hard beech (*Nothofagus truncata*) and tawa (*Beilschmiedia tawa*) with mangeao (*Litsea calicaris*), kohekohe (*Dysoxylum spectabile*), and frequent pukatea (*Laurelia novaezelandiae*) in the gully bottoms. Rewarewa, manuka (*Leptospermum scoparium*) and mamaku (*Cyathea medullaris*) is also present on the hillslopes.

There is also a large area of coastal scrub of which akeake (*Dodonaea viscosa*) is an important component.

Notable species include a large colony of King fern (*Marattia salicina*). This fern is identified as 'Chronically Threatened (Serious Decline)' nationally but is regionally distinctive as it is known to inhabit only a few scattered coastal and semi-coastal locations in north Taranaki.

#### Fauna

Unknown. No specific indigenous fauna species have been recorded for the Kuwhatahi site, but likely to be important habitat as it is part of a continuous forest tract from this site to Waitaanga Plateau. Kaka (*Nestor meridionalis*), which is identified as 'Acutely Threatened (Nationally Endangered)', and North Island brown kiwi (*Apteryx mantelli*), which is identified as 'Chronically Threatened (Serious Decline)' are present in the adjacent Hutiwai Conservation Area.

### **Ecological values**

Ecological values	Rank	Comment	
Rarity and distinctiveness	High	Regionally distinctive in that it contain a significant colony of the regionally uncommon and 'Chronically Threatened' king fern ( <i>Marattia salicina</i> )	
Representativeness	Low	LENZ environment not threatened	
Ecological context	High	Includes the only truly coastal hard beech forest in the North Taranaki Ecological District and is one of the few such stands in the North Island. It is also interconnected with semi coastal and lowland forests of Huitiwai and Rapanui (Headwaters) as part of forest continuum extending from the coast inland to Waitaanga Plateau	
Sustainability	Positive	In good vegetative condition. Key ecological processes still influer 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 Kuwhatahi site's ecological values are as follows:

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

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

