

# Cardenica Woodlot

At a glance (last updated: April 2016)			
TRC reference:	BD/9561	Ecological district:	Egmont
Other reference:		LENZ environment:	F5.2b
Land tenure:	Private	Protection status:	A, B, C
GPS:	E1703611 N5673407	Area:	2.1 ha

## Location

The Cardenica Woodlot KNE is located on privately owned land on Clearview Road near Lepperton, 7 km North of Inglewood. The site is in the Egmont ecological district and located within the Waiongana catchment.

## General description

The KNE area is made up of a 2.1 ha remnant of semi costal forest adjacent to the Te Wairoa KNE. The remnant is fenced, but in some areas the fence is no longer stock proof. The site lies in close proximity to other Key Native Ecosystems in the area, including Lepperton bush and Tarurutangi swamp.

## Ecological features

### Flora

A mix of forest types is present including semi-coastal/lowland tawa/pukatea/kohekohe forest and lowland swamp forest containing pukatea (*Laurelia nova-zelandiae*) and swamp maire (*Syzygium maire*). Other canopy trees include titoki (*Alectryon excelsus*), and rewarewa (*Knightia excelsa*).

A number of other plant species are also present in the canopy and sub-canopy. These include kahikatea (*Dacrycarpus dacrydioides*), puriri (*Vitex lucens*), karaka (*Corynocarpus laevigatus*), mamaku (*Cyathia medullaris*), kawakawa (*Piper excelsum*), pigeonwood (*Hedycarya arborea*), various Coprosmas (*Coprosma* spp.), silver fern (*Cyathea dealbata*), mahoe (*Melicytus ramiflorus*), nikau (*Rhopalostylis sapida*), and supplejack (*Ripogonum scandens*).

The regionally distinctive plants swamp maire, tawhirikaro (*Pittosporum cornifolium*) and the fern *Deparia petersenii* subsp. *congrua* are present at the site.

### Fauna

Native birdlife recorded in and around the KNE include the New Zealand pigeon (*Hemiphaga novaeseelandiae*), Tui (*Prosthemadera novaeseelandiae*), grey warbler (*Gerygone igata*) and fantail (*Rhipidura fuliginosa*). Good habitat exists for notable freshwater fish, reptiles and invertebrates.

## Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Contains the 'Regionally Distinctive' swamp maire ( <i>Syzygium maire</i> ), Tawhirikaro ( <i>Pittosporum cornifolium</i> ) and <i>Deparia petersenii</i> subsp. <i>Congrua</i>
Representativeness	High	Contains indigenous vegetation that is poorly represented in Taranaki and classified as F5.2b - an 'acutely threatened' LENZ environment.
Ecological context	Medium	The site provides connectivity to other Key Native Ecosystems nearby including Te Wairoa, Lepperton bush and Tarurutangi swamp.
Sustainability	Positive	Key ecological processes still influence the site. Under appropriate management it will remain resilient to existing and potential threats.

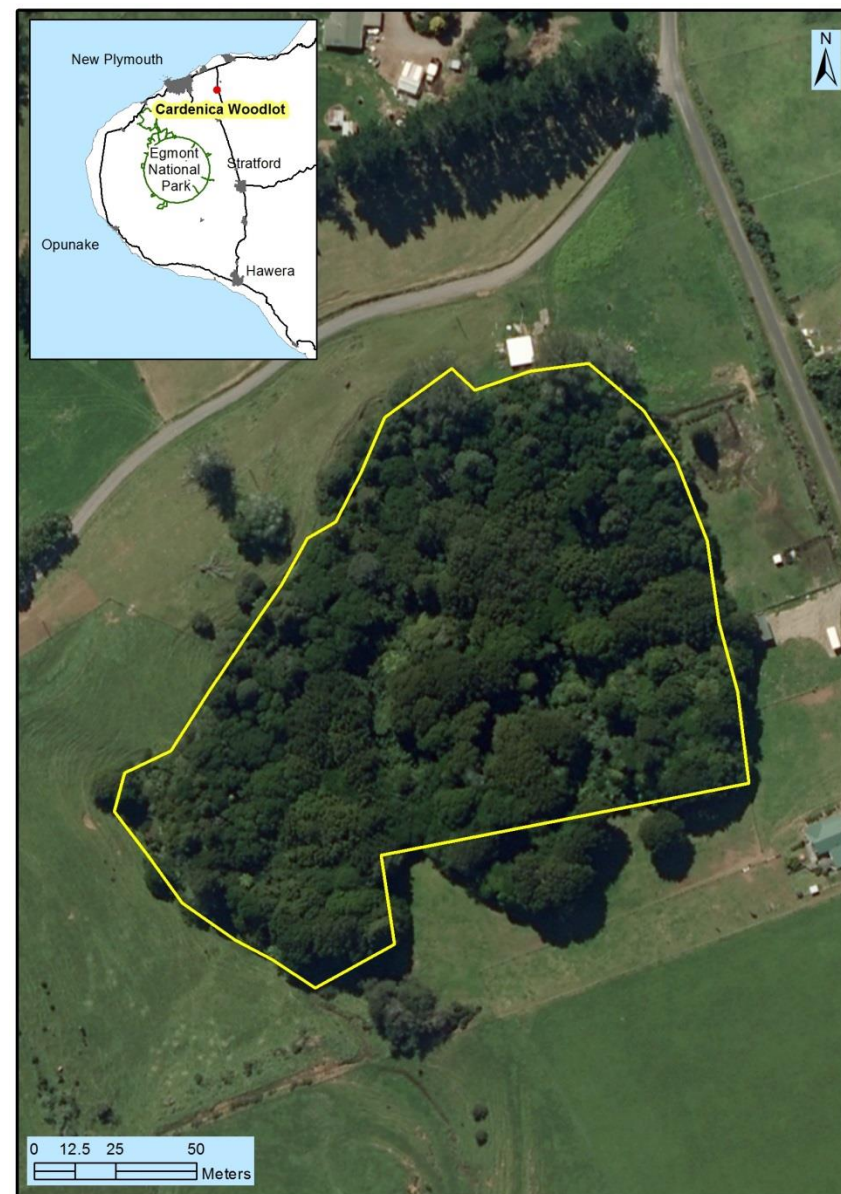
## Management threats and response

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

Threats to ecological values	Potential threat	Comment
Pest animals	High	Possums, cats, rats, hedgehogs and mustelids.
Weeds	Medium	Woolly nightshade, blackberry, selaginella, Aroid lily and <i>Tradescantia</i> .
Habitat modification	High	The remnant is fenced but the fence is no longer stock proof in some areas. Stock grazing is modifying the habitat in places.

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

Site protection	Yes/No	Description
<b>A</b> Public ownership or formal agreement	Yes	The site is legally protected by a consent condition under the RMA section 221.
<b>B</b> Regulatory protection by local government	Yes	General regional or district rules might apply.
<b>C</b> Active protection	Yes	Site is within the self help possum control area and receives regular pest animal control for possums.



# Forest & Bees Takou Bush

At a glance (last updated: April 2016)			
TRC reference:	BD/9563	Ecological district:	Matemateaonga
Other reference:		LENZ environment:	F1.1d (481.3 ha) F7.2a (0.3 ha)
Land tenure:	Private	Protection status:	A, B, C
GPS:	1739591E – 5640092N	Area:	481.6 ha

## Location

The Forest & Bees Takou Bush KNE is located on privately owned land near Omoana in eastern Taranaki. The site is within the Matemateaonga Ecological District.

## General description

The KNE covers 481.6 ha and is a mix of original and cut over lowland forest with small areas of modified regenerating native forest in places. The forest is typical of original and regenerating forest found in the eastern Taranaki area. The KNE is surrounded by adjacent native forest including a 6.5km boundary with the Waitotara Conservation Area. Other nearby protected areas includes the Tahunamaere Scenic Reserve, Rawhitiroa Road Conservation Area, Waitiri Scenic Reserve and Omoana Bush QEII. The site is located within the Whenuakura River catchment.

## Ecological features

### Vegetation

Canopy vegetation primarily consists of mixed tawa/hardwood/broadleaf with areas of manuka (*Leptospermum scoparium*) and kanuka (*Kunzea robusta*) present in some areas. Notable species are likely to be present including Tawhirikaro (*Pittosporum cornifolium*).

### Fauna

Birdlife recorded in the area includes the New Zealand falcon (*Falco novaeseelandiae*) and the North Island brown kiwi (*Apteryx australis mantelli*), which are both identified as 'Threatened, Nationally Vulnerable'. Common native birds in the area include the North Island robin (*Petroica longipes*), fantail (*Rhipidura fuliginosa*), bellbird (*Anthornis melanura*), grey warbler (*Gerygone igata*), pied tomtit (*Petroica macrocephala*), tui (*Prothemadera novaeseelandiae novaeseelandiae*) and New Zealand pigeon (*Hemiphaga novaeseelandiae*).

Other notable native fauna will be present including bats, reptiles and invertebrates.

### Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Contains the 'Threatened' New Zealand falcon and North Island brown kiwi. Likely to contain other notable species including bats, reptiles and invertebrates.
Representativeness	High	Contains indigenous vegetation on F7.2a – an 'At Risk' LENZ environment. The greater area contains indigenous vegetation on F1.1d ('Less reduced, better protected') LENZ environment.
Ecological context	High	Close to and provides connectivity to Tahunamaere Scenic Reserve, Rawhitiroa Road Conservation Area, Waitiri Scenic Reserve, Waitotara Conservation Area and Omoana Bush KNE. Also provides core habitat for the threatened New Zealand falcon and North Island brown kiwi.
Sustainability	Positive	In good vegetative condition and large in area. Key ecological processes still influence the site. Under appropriate management, it can remain resilient to existing or potential threats.



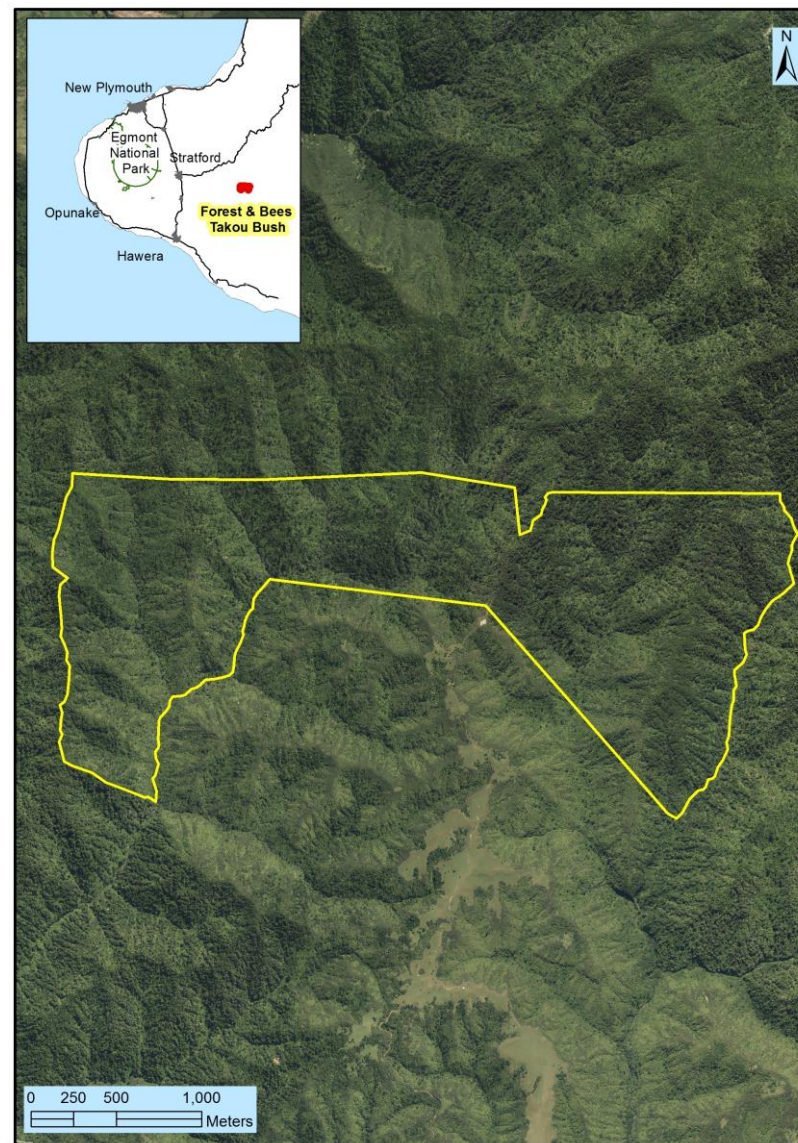
## Management threats and response

Potential and actual threats to the sustainability of Forest & Bees Takou Bush site's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Medium to high	Possums, goats, cats, mustelids, and rats.
Weeds	Low	Unknown although likely to be insignificant.
Habitat modification	Low	Low threat from low scale sustainable timber harvest.

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

Site protection	Yes/No	Description
A Public ownership or formal agreement	Yes	Landowner in discussion with QEII regarding a covenant for the whole site.
B Regulatory protection by local government	Yes	General regional or district rules might apply.
C Active protection	Yes	The landowner currently undertakes some pest animal control.



# Korito Heights

At a glance (last updated: April 2016)	
TRC reference: BD/9554	Ecological district: Egmont
Other reference: 1622447 (this inventory sheet)	LENZ environment: F5.3b (20.ha)
Land tenure: Private	Protection status: A, B, C
GPS: E1693562 N5660440	Area: 20ha

## Location

The Korito Heights KNE is located on private land approximately 13km south of New Plymouth in the Egmont Ecological District.

## General description

The Korito Heights KNE area consists of a moderately sized (20ha) modified/regenerating lowland forest remnant on the gully margins of a major tributary of the Mangawarawara Stream. The canopy is dominated mainly by kamahi (*Weinmannia racemosa*) although miro (*Prumnopitys ferruginea*) and hinau (*Elaeocarpus dentatus*) are present in places. The KNE area is long and narrow and covers the length of the whole property from Egmont National Park to the lower property boundary (almost 2kms of stream margin). The area provides very good connectivity and compliments other KNEs and habitats in the area such as Egmont National Park, Alfred Road wetland and Carrington Road A.

## Ecological features

### Flora

Although the canopy is dominated by kamahi other species such as miro, toro (*Myrsine salicina*), hinau, northern rata (*Metrosideros robusta*) tawa (*Beilschmiedia tawa*) and rewarewa (*Knightia excelsa*) are present and are in good condition. A good sub canopy and understorey is also present and includes mahoe (*Meliccytus ramiflorus subsp. ramiflorus*), wineberry (*Aristotelia serrata*), raukawa (*Raukawa edgerleyi*), rangiora (*Brachyglottis repanda*), pigeonwood (*Hedycarya arborea*), mountain cabbage tree (*Cordyline indivisa*) and hangehange (*Geniostoma ligustrifolium var. ligustrifolium*). Tree ferns and ground ferns are common in places and

seedlings and saplings are also common. The area falls within the 'Less reduced, better protected' LENZ environment F5.3b.

### Fauna

Native birdlife recorded in and around the Korito Heights KNE area include the New Zealand pigeon (*Hemiphaga novaeseelandiae*), grey warbler (*Gerygone igata*), fantail (*Rhipidura fuliginosa*), tui (*Prosthemadera novaeseelandiae*), and silvereye (*Zosterops lateralis*). Very good habitat exists for notable freshwater fish such as shortjaw kokopu (*Galaxias postvectis*) and koaro (*Galaxias brevipinnis*). The 'At Risk' longfin eel (*Anguilla dieffenbachii*) is present along with the native freshwater crayfish (*Paranephrops planifrons*).

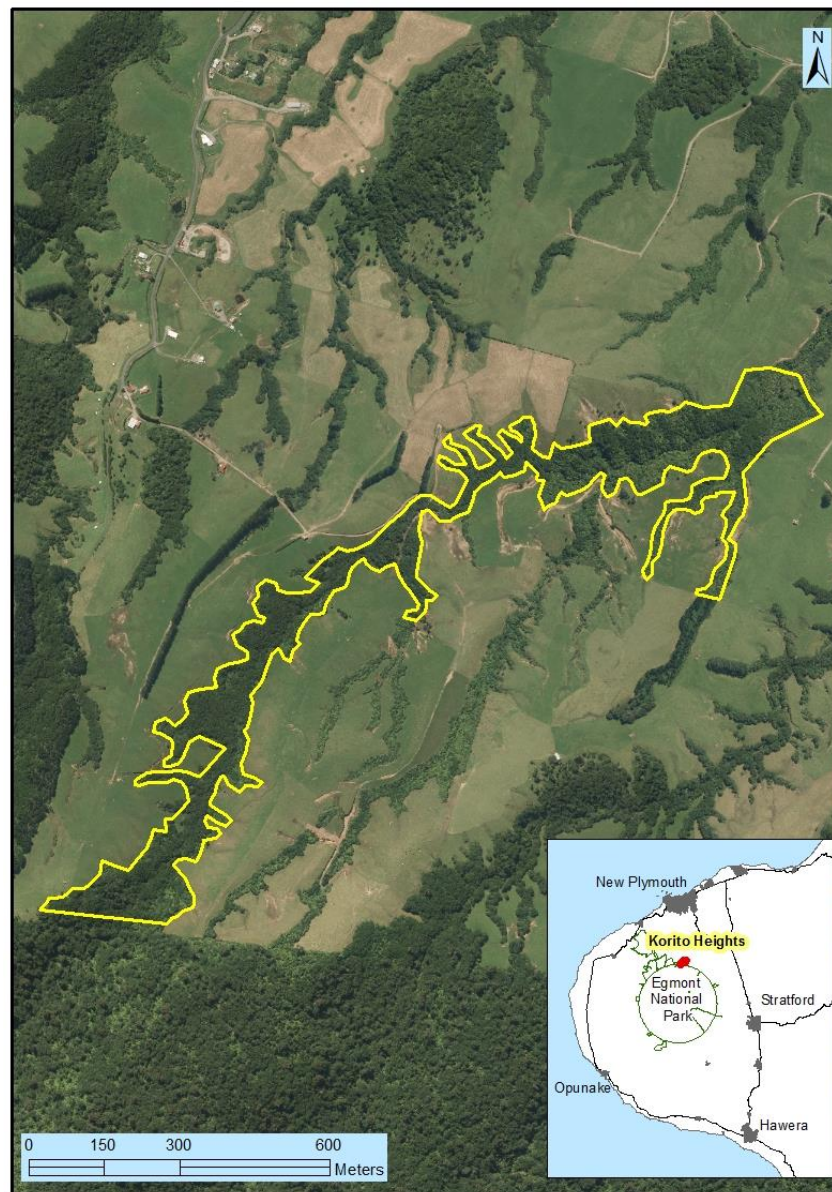
## Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	Medium	Contains good habitat for the 'At Risk' longfin eel ( <i>Anguilla dieffenbachii</i> ) and other notable fauna species.
Representativeness	Low	Contains vegetation associated with (F5.3b) 'Less reduced, better protected' LENZ environment.
Ecological context	High	Provides additional habitat and greater connectivity with other Key Native Ecosystems in this area such as the Egmont National Park, Alfred Road and Carrington Road A.
Sustainability	Positive	Key ecological processes still influence the site and with appropriate management, it can remain resilient to existing or potential threats. The site will have the additional benefit of being formally protected.

Threats to ecological values	Potential threat	Comment
Pest animals	High	Goats, possums, cats, mustelids, hedgehogs and rodents.
Weeds	Medium	Scattered areas of barberry, blackberry, gorse, and Himalayan honeysuckle.
Habitat modification	Low	The covenanted areas will be securely fenced.

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

Site protection		Yes/No	Description
A	Public ownership or formal agreement	Yes	The landowner is currently working with QEII towards a covenant for the habitat.
B	Regulatory protection by local government	Yes	General regional or district rules might apply.
C	Active protection	Yes	The landowner undertakes occasional pest animal control as part of the possum self help programme.





# Mangapuni

At a glance (last updated: April 2016)			
TRC reference:	BD/9564	Ecological district:	Matemateaonga
Other reference:		LENZ environment:	F1.3b (749.0 ha)
Land tenure:	Private	Protection status:	A, B, C
GPS:	1760319E – 5600293N	Area:	749.0 ha

## Location

The Mangapuni KNE is located on privately owned land 12kms southeast of Waitotara in south Taranaki. The site is within the Matemateaonga Ecological District.

## General description

The Mangapuni KNE covers 749ha and is made up of a mix of original lowland forest (over sixty percent) and modified regenerating native forest typical of the south Taranaki area. The whole site is protected with a QEII covenant. Other nearby KNE's include Skilton's Bush, Lake Waikato, Lake Waikare and the Waitotara Wharangi Block. The site is located within the Waitotara River catchment.

## Ecological features

### Vegetation

Canopy vegetation of the original forest area primarily consists of a mix of beech, hardwood, broadleaf and podocarp. The modified areas are dominated by manuka (*Leptospermum scoparium*), kanuka (*Kunzea robusta*) with mahoe (*Melicytus ramiflorus subsp. ramiflorus*), rewarewa (*Knightia excelsa*), hinau (*Elaeocarpus dentatus*) and young emergent black beech (*Fuscospora solandri*) present in places. Black beech is a notable species for this site and other notable species may be present including Tawhirikaro (*Pittosporum cornifolium*).

## Fauna

Birdlife recorded in the area includes the New Zealand falcon (*Falco novaeseelandiae*) and the North Island brown kiwi (*Apteryx australis mantelli*), which are both identified as 'Threatened, Nationally Vulnerable'. Common native birds in the area include the fantail (*Rhipidura fuliginosa*), bellbird (*Anthornis melanura*), grey warbler (*Gerygone igata*), pied tomtit (*Petroica macrocephala toitoi*), tui (*Prothemadera novaeseelandiae*) and New Zealand pigeon (*Hemiphaga novaeseelandiae*).

Other notable native fauna will be present including bats, reptiles and invertebrates.

## Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Contains the 'Threatened' New Zealand falcon and North Island brown kiwi. Contains the Regionally Distinctive black beech. Other threatened and notable species are likely to be present.
Representativeness	Low	Contains indigenous vegetation on F1.3b ('Less reduced, better protected') LENZ environment.
Ecological context	High	Close to and provides connectivity with Skilton's Bush, Lake Waikato, Lake Waikare and the Waitotara Wharangi Block KNE's. Also provides core habitat for the threatened New Zealand falcon and North Island brown kiwi.
Sustainability	Positive	In good vegetative condition and large in area. Key ecological processes still influence the site. Under appropriate management, it can remain resilient to existing or potential threats.

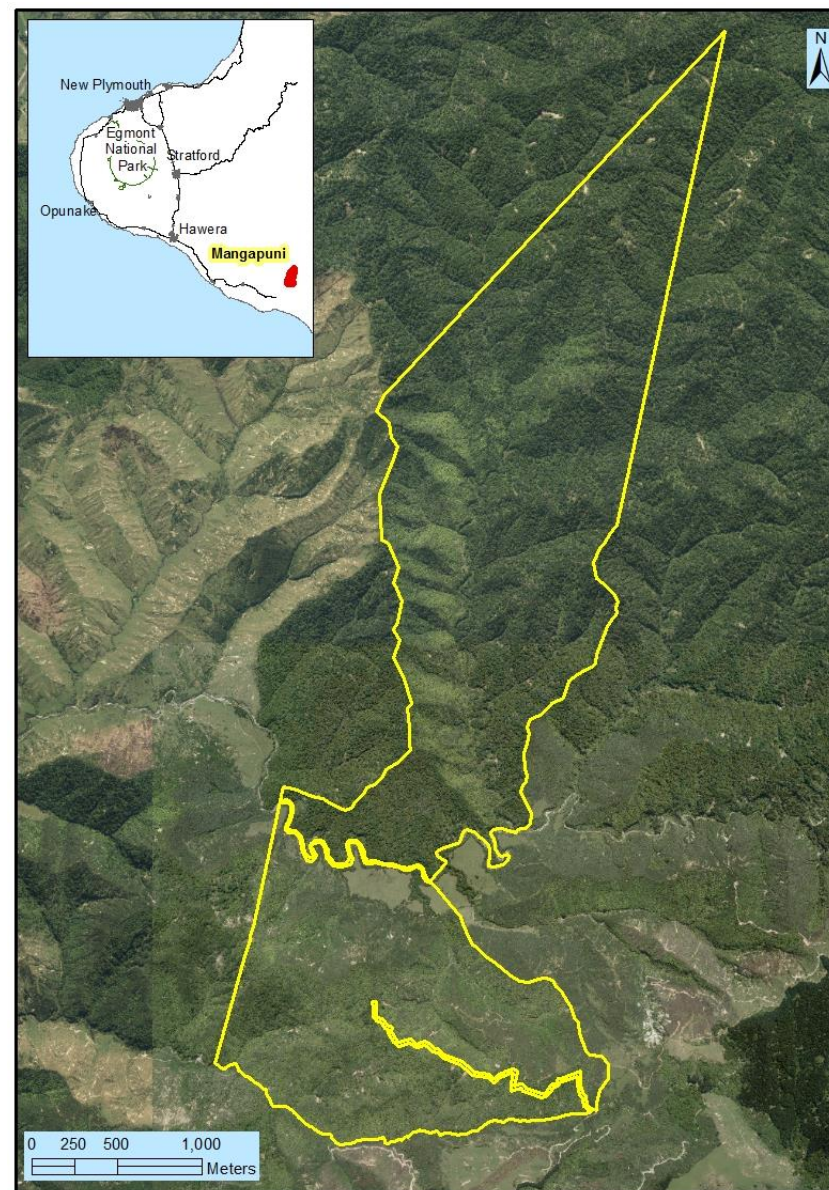
## Management threats and response

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

Threats to ecological values	Level of risk	Comment
Pest animals	Medium to high	Possums, goats, cats, mustelids, and rats.
Weeds	Low	Localised areas of gorse.
Habitat modification	Low	Covenant conditions apply.

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

Site protection	Yes/No	Description
A Public ownership or formal agreement	Yes	Covered by a QEII covenant.
B Regulatory protection by local government	Yes	General regional or district rules might apply.
C Active protection	Yes	The landowner undertakes some pest animal control.





# NRGE Farms Limited Bush Block and Wetlands

At a glance (last updated: April 2016)			
TRC reference:	BD/9562	Ecological district:	Egmont
Other reference:		LENZ environment:	F5.2b
Land tenure:	Private	Protection status:	A, B, C
GPS:	E 1672627 , N 5653877	Area:	7.3 ha

## Location

The NRGE Farms Limited Bush Block and Wetlands KNE is located on privately owned land on Kekeua road, 3.5km northwest of Pungarehu in west Taranaki. The site is in the Egmont Ecological District and located within the Whanganui stream catchment.

## General description

The KNE area is made up of three small forest remnants in close proximity to each other in rough lahar mounds and depressions on the west Taranaki ring plain. One remnant is a wetland and the other two contain a mix of wet and dry areas. A mix of forest types is present including semi-coastal/lowland tawa/pukatea/kohekohe forest and lowland swamp forest containing pukatea and swamp maire. The remnant lies in close proximity to other Key Native Ecosystems in the area, including Donald's Bush and Stent Road Bush.

## Ecological features

### Flora

The forest remnants are good examples of semi-coastal tawa forest and are located in an 'Acutely Threatened' LENZ environment (F5.2b, less than 10% indigenous forest remains in this environment type). The main canopy is a mix of tawa (*Beilschmiedia tawa*), kohekohe (*Dysoxylum spectabile*), rimu (*Dacrydium cupressinum*), pukatea (*Laurelia novae-zelandiae*), rewarewa (*Knightia excelsa*) and is generally in good condition. The understorey and ground cover is in good condition in the wetland area although sparser in the drier areas due to stock browse. The understorey present consists of a number of shrub species including kawakawa (*Piper excelsum*) and

*Coprosma areolata* along with a wide range of ferns. Of note is a small area containing swamp maire (*Syzygium maire*) (rated Regionally Distinctive).

### Fauna

Native birdlife recorded in and around the KNE include the New Zealand pigeon (*Hemiphaga novaeseelandiae*), grey warbler (*Gerygone igata*), fantail (*Rhipidura fuliginosa*) and sacred kingfisher (*Todiramphus sanctus vagans*). Notable native freshwater fish are present including banded kokopu (*Galaxias fasciatus*) and brown mudfish (*Neochanna apoda*). Good habitat exists for notable reptiles and invertebrates.

## Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Contains the 'Regionally Distinctive' swamp maire ( <i>Syzygium maire</i> ), banded kokopu ( <i>Galaxias fasciatus</i> ) and brown mudfish ( <i>Neochanna apoda</i> ).
Representativeness	High	Contains indigenous vegetation that is poorly represented in Taranaki and classified as F5.2b - an 'acutely threatened' LENZ environment.
Ecological context	Medium	The remnant provides connectivity to other Key Native Ecosystems nearby including Donald's Bush and Stent Road Bush.
Sustainability	Positive	Key ecological processes still influence the site. Under appropriate management it will remain resilient to existing and potential threats.

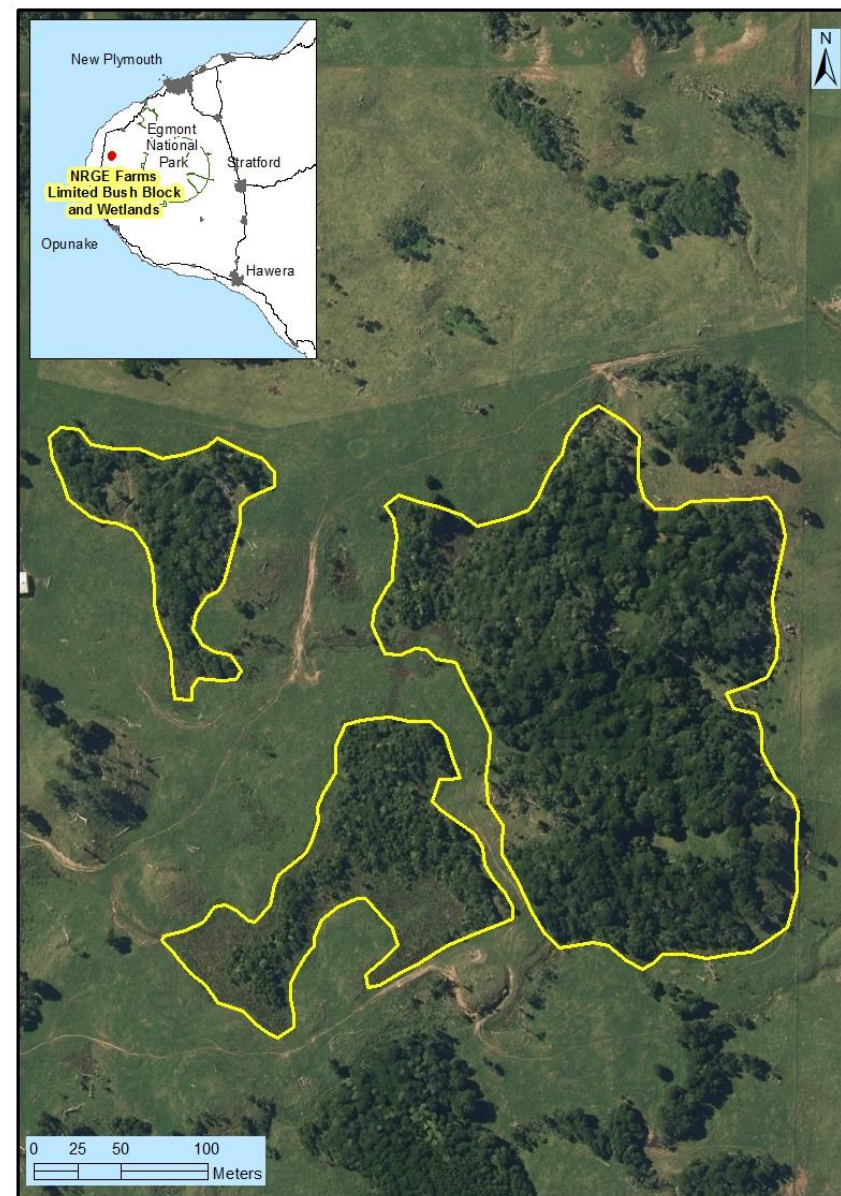
## Management threats and response

Potential and actual threats to the sustainability of NRGE Farms Limited Bush Block and Wetlands site's ecological values are as follows:

Threats to ecological values	Potential threat	Comment
Pest animals	High	Possums, cats, rats, hedgehogs and mustelids.
Weeds	Medium	Woolly nightshade, blackberry, selaginella and inkweed.
Habitat modification	High	The remnants are currently unfenced and grazing is extensive in some areas.

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

Site protection	Yes/No	Description
<b>A</b> Public ownership or formal agreement	Yes	Landowners are willing to enter into a MOE for this area.
<b>B</b> Regulatory protection by local government	Yes	General regional or district rules might apply.
<b>C</b> Active protection	Yes	Site is within the self help possum control area and receives regular pest animal control for possums.



## QEII 5/06/282

At a glance (last updated: April 2016)			
TRC reference:	BD/9565	Ecological district:	Egmont
Other reference:		LENZ environment:	F5.2b
Land tenure:	Private	Protection status:	A, B, C
GPS:	E1705022 N5676192	Area:	1.9 ha

### Location

The QEII 5/06/282 KNE is located on privately owned land on Richmond Road near Lepperton, 7 km North of Inglewood. The site is in the Egmont Ecological District and located within the Waiongana catchment.

### General description

The KNE area is made up of a 1.9 ha remnant of semi costal forest adjacent to the Mangarewa stream very near Lepperton. The remnant is protected with a QEII covenant and securely fenced. The site lies in close proximity to other Key Native Ecosystems in the area, including Lepperton bush and Te Wairoa.

### Ecological features

#### Flora

The forest type is a mix of semi-coastal/lowland tawa/pukatea/kohekohe forest. Other canopy trees include titoki (*Alectryon excelsus*), rewarewa (*Knightia excelsa*) and puriri (*Vitex lucens*). A number of other plant species are also present in the sub canopy including karaka (*Corynocarpus laevigatus*), mamaku (*Cyathea medullaris*), kawakawa (*Piper excelsum*), pigeonwood (*Hedycarya arborea*), various Coprosmas (*Coprosma* spp.), silver fern (*Cyathea dealbata*) and mahoe (*Meliclytus ramiflorus*).

#### Fauna

Native birdlife recorded in and around the KNE include the New Zealand pigeon (*Hemiphaga novaeseelandiae*), Tui (*Prosthemadera novaeseelandiae*), grey warbler (*Gerygone igata*), fantail (*Rhipidura fuliginosa*), silvereye (*Zosterops lateralis lateralis*) and sacred kingfisher

(*Todiramphus sanctus vagans*). Fish life in the Mangarewa stream includes the 'At Risk' longfin eel (*Anguilla dieffenbachii*) and redfin bully (*Gobiomorphus huttoni*). Other aquatic life includes the shortfin eel (*Anguilla australis*), freshwater crayfish (*Paranephrops planifrons*), freshwater shrimp (*Paratya*) and the introduced brown trout (*Salmo trutta*).

Good habitat exists for notable reptiles and invertebrates.

### Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	Medium	Contains the 'At Risk' longfin eel ( <i>Anguilla dieffenbachii</i> ) and redfin bully ( <i>Gobiomorphus huttoni</i> ).
Representativeness	High	Contains indigenous vegetation that is poorly represented in Taranaki and classified as F5.2b - an 'acutely threatened' LENZ environment.
Ecological context	Medium	The site provides connectivity to other Key Native Ecosystems nearby including Te Wairoa and Lepperton bush.
Sustainability	Positive	Key ecological processes still influence the site. Under appropriate management it will remain resilient to existing and potential threats.

### Management threats and response

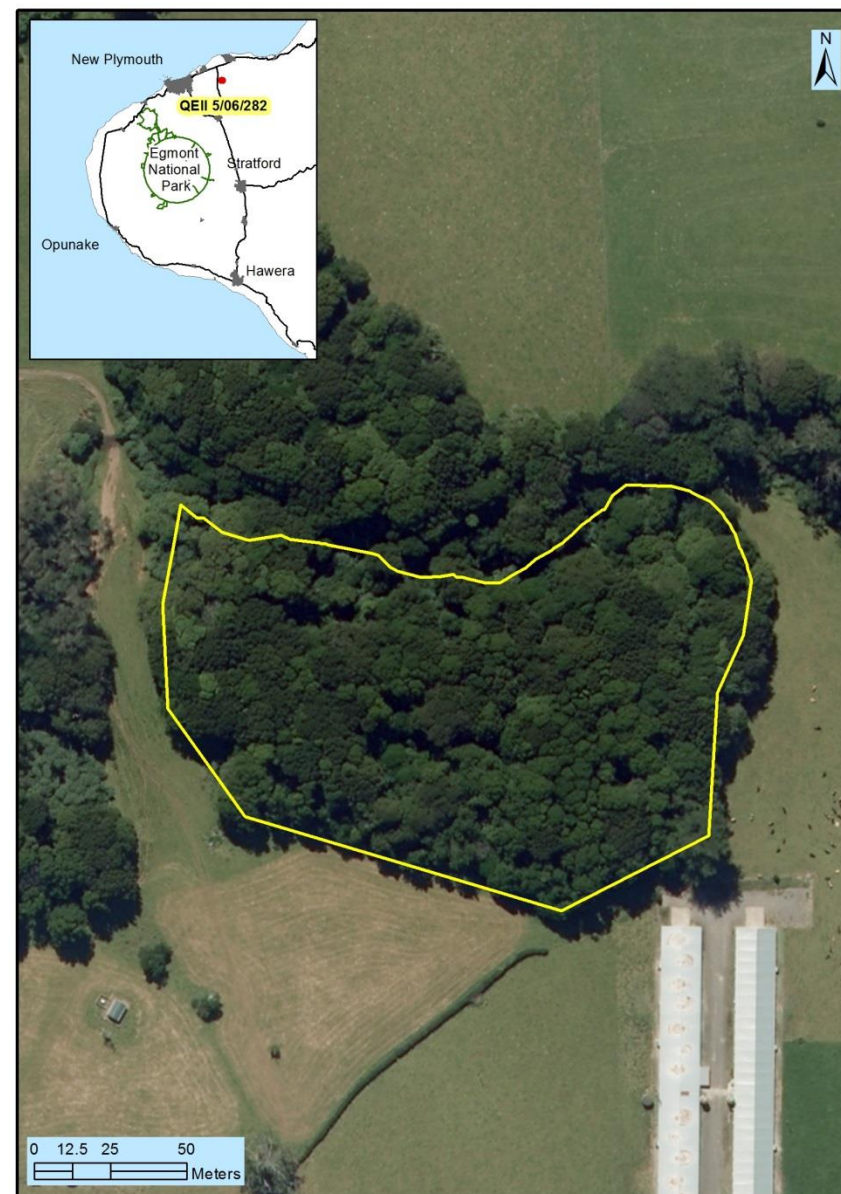
Potential and actual threats to the sustainability of the QEII 5/06/282 site's ecological values are as follows:

Threats to ecological values	Potential threat	Comment
Pest animals	High	Possums, cats, rats, hedgehogs and mustelids.
Weeds	Medium	Woolly nightshade, old mans beard, barberry, inkweed, hydrangea, holly, cherry tree, Jerusalem cherry, sycamore, African clubmoss, Aroid lily and <i>Tradescantia</i> .
Habitat modification	High	The remnant is fenced but the fence is no longer stock proof in some areas. Stock grazing is modifying the habitat in places.



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

Site protection	Yes/No	Description
<b>A</b> Public ownership or formal agreement	Yes	The site is legally protected with a QEII covenant.
<b>B</b> Regulatory protection by local government	Yes	General regional or district rules might apply.
<b>C</b> Active protection	Yes	Site is within the self help possum control area and receives regular pest animal control for possums.



# Redpath Bush

At a glance (last updated: April 2016)

TRC reference:	BD/9540	Ecological district:	Egmont
Other reference:		LENZ environment:	F5.2b
Land tenure:	Private	Protection status:	A, B, C
GPS:	1706301 N 5665601 E	Area:	6.2 ha

## Location

The Redpath Bush KNE is located on privately owned land on Tarata Road approximately 2 km East of Inglewood. The site is in the Egmont Ecological District and located within the Waitara catchment.

## General description

The KNE area is made up of two remnants of lowland forest with a total size of 6.2 ha. The larger remnant is bordered by large sycamore trees and has a mostly tawa dominated canopy with some regenerating native vegetation surrounding a small creek. The smaller remnant lies along the Kurapete stream. Both remnants are fenced, but the smaller remnant has some stock invasion from the other side of the Kurapete stream. The site lies in close proximity to other Key Native Ecosystems in the area, including Maketawa stream forests and the Norfolk road KNE.

## Ecological features

### Flora

The main canopy of the site is dominated by tawa (*Beilschmiedia tawa*), with other canopy trees including pukatea (*Laurelia nova-zelandiae*), kahikatea (*Dacrycarpus dacrydioides*), rimu (*Dacrydium cupressinum*) and rewarewa (*Knightia excelsa*). A number of other plant species are also present in the canopy and sub-canopy. These include, kohekohe (*Dysoxylum spectabile*), kamahi (*Weinmannia racemosa*), toropapa (*Alseuosmia macrophylla*), mamaku (*Cyathea medullaris*), kawakawa (*Piper excelsum*), pigeonwood (*Hedycarya arborea*), round leaved coprosma (*Coprosma rotundifolia*), silver tree fern (*Cyathea dealbata*), mahoe (*Melicytus ramiflorus*), kanono (*Coprosma grandifolia*), and supplejack (*Ripogonum scandens*).

### Fauna

Native birdlife recorded in and around the KNE include the New Zealand pigeon (*Hemiphaga novaeseelandiae*), Tui (*Prosthemadera novaeseelandiae*), grey warbler (*Gerygone igata*) and fantail (*Rhipidura fuliginosa*). Notable freshwater fish species recorded from the Kurapete stream nearby include giant kokopu (*Galaxias argenteus*) and lamprey (*Geotria australis*). Good habitat exists for notable reptiles and invertebrates.

## Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Contains the 'At Risk' giant kokopu ( <i>Galaxias argenteus</i> ) and 'Threatened' lamprey ( <i>Geotria australis</i> ). Both species are also 'Regionally Distinctive'.
Representativeness	High	Contains indigenous vegetation that is poorly represented in Taranaki and classified as F5.2b - an 'acutely threatened' LENZ environment.
Ecological context	Medium	The site provides connectivity to other Key Native Ecosystems nearby including Maketawa stream forests and the Norfolk road KNE.
Sustainability	Positive	Key ecological processes still influence the site. Under appropriate management it will remain resilient to existing and potential threats.

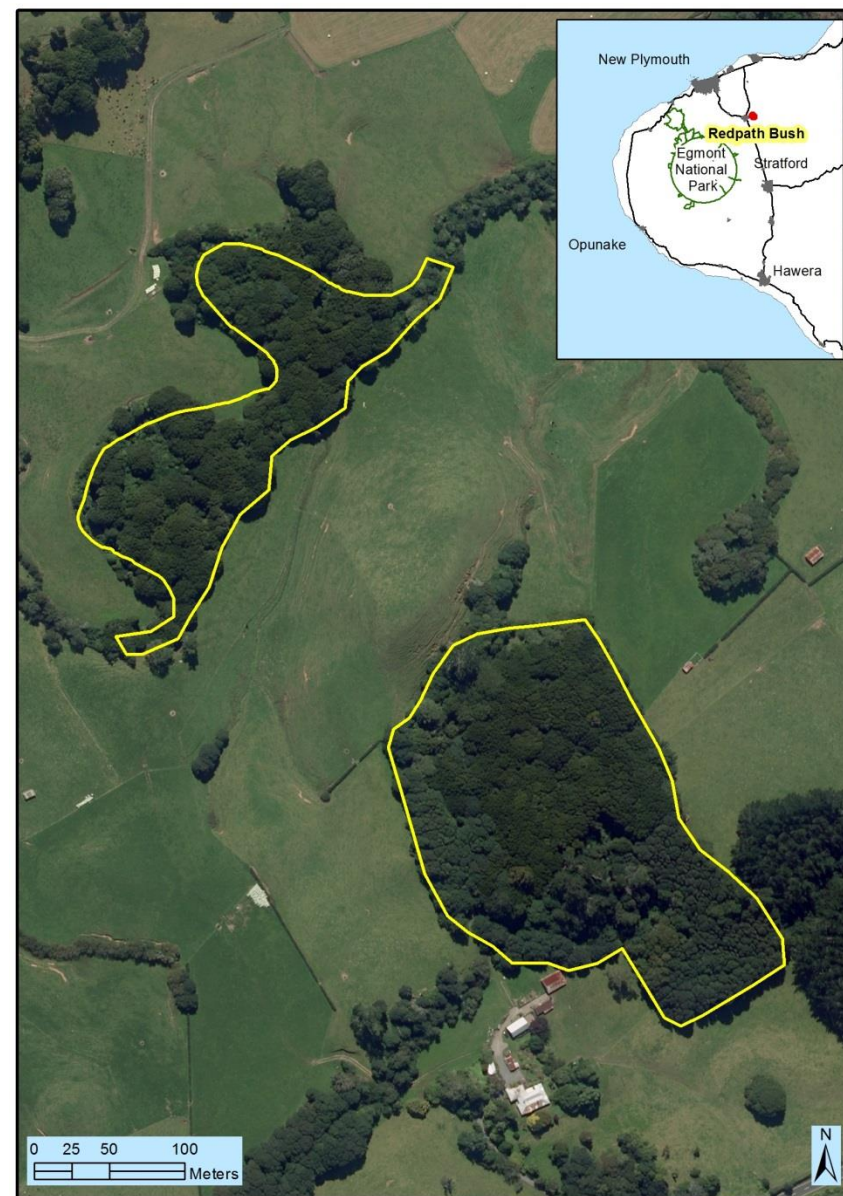
## Management threats and response

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

Threats to ecological values	Potential threat	Comment
Pest animals	High	Possums, cats, rats, hedgehogs and mustelids.
Weeds	Medium	Old mans beard, blackberry, African clubmoss, ivy, cherry, and <i>Tradescantia</i> .
Habitat modification	High	The remnants are fenced but there is stock invasion from across the Kurapete stream. Stock grazing is modifying the habitat in places.

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

Site protection	Yes/No	Description
<b>A</b> Public ownership or formal agreement	Yes	The owners are working with QEII to legally protect the site.
<b>B</b> Regulatory protection by local government	Yes	General regional or district rules might apply.
<b>C</b> Active protection	Yes	Site is within the self help possum control area and receives regular pest animal control for possums.





# Waimoku Wetland

At a glance (last updated: April 2016)

<b>TRC reference:</b>	BD/7154	<b>Ecological district:</b>	Egmont
<b>Other reference:</b>		<b>LENZ environment:</b>	F5.2b
<b>Land tenure:</b>	Private	<b>Protection status:</b>	A, B, C
<b>GPS:</b>	E 1681675 , N 5669637	<b>Area:</b>	0.6 ha

## Location

The Waimoku Wetland KNE is located on privately owned land on Shearer Drive in Oakura. The site is in the Egmont Ecological District and located within the Waimoku stream catchment.

## General description

The KNE area is made up of a regenerating wetland area with the Waimoku stream running along the western edge. Little original vegetation remains but the wetland has been planted in native species and is regenerating. The wetland contains a considerable number of pest plant species which will require significant effort to bring under control. The site lies in close proximity to other Key Native Ecosystems in the area, including Matekai Park and Mckie QEII Covenant.

## Ecological features

### Flora

The wetland is dominated by planted flax (*Phormium tenax*) and cabbage trees (*Cordyline australis*) with natural regeneration of cutty grass (*Carex geminata*). Of note is the presence of the regionally distinctive tree whau (*Entelea arborescens*). The flora of the site will continue to regenerate into a more natural state if pest plant issues can be managed.

### Fauna

Native birdlife recorded in and around the KNE include tui (*Prosthemadera novaeseelandiae*), grey warbler (*Gerygone igata*), fantail (*Rhipidura fuliginosa*) and sacred kingfisher (*Todiramphus sanctus vagans*).

Notable native freshwater fish are present including giant kokopu (*Galaxias argenteus*). Good habitat exists for notable reptiles and invertebrates.

## Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Contains the 'Regionally Distinctive' Whau ( <i>Entelea arborescens</i> ) and giant kokopu ( <i>Galaxias argenteus</i> )
Representativeness	High	Contains indigenous vegetation that is poorly represented in Taranaki and classified as F5.2b - an 'acutely threatened' LENZ environment.
Ecological context	Medium	The site provides connectivity to other Key Native Ecosystems nearby including Matekai Park and Mckie QEII Covenant.
Sustainability	Positive	Key ecological processes influence the site. Under appropriate management it will remain resilient to existing and potential threats.

## Management threats and response

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

Threats to ecological values	Potential threat	Comment
Pest animals	High	Possums, cats, rats, hedgehogs and mustelids.
Weeds	High	Woolly nightshade, blackberry, selaginella, bamboo, Kahili ginger, Crack willow, and <i>Tradescantia</i> . With the threat of mignonette vine invading from adjacent property.
Habitat modification	High	The wetland has been significantly modified in the past but is regenerating to a near natural state.

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

Site protection	Yes/No	Description
<b>A</b> Public ownership or formal agreement	Yes	Site is protected by an existing QEII covenant.
<b>B</b> Regulatory protection by local government	Yes	General regional or district rules might apply.
<b>C</b> Active protection	Yes	The landowner is actively managing pest plants at the site and is motivated to also manage pest animals.

