Glanafon Wetlands

At a glance (last updated: March 2013)				
TRC reference:		Ecological district:	Matemateaonga	
Other reference:		LENZ environment:	F7.2a (6.6 ha)	
			F5.2a (6.6 ha)	
Land tenure:	Private	Protection status:	A, B, C	
GPS:	E 1731230 N 5645605	Area:	13.2 ha	

Location

The Glanafon Wetlands Key Native Ecosystem is located on private land near Tututawa approximately 20km east of Stratford in East Taranaki.

General description

The Glanafon Wetlands Key Native Ecosystem area consists of natural wetland areas, two moderately sized manmade ponds and one large manmade pond. All of these wetlands are located in a single gully system, allowing connectivity between habitats. Small areas of native vegetation are present in the wetland areas and on the retired margins. An enhancement planting programme of native vegetation around the buffer of the wetlands has been initiated to increase the wetland sustainability and enhance biodiversity values at this site.

'Threatened' and 'At Risk' wildlife such as the New Zealand dabchick and pied stilt already reside in or visit the newly created ponds. Other notable fauna are known in the area and will also inhabit this area as enhancement continues.

Ecological features

Flora

Flora species naturally found in the in this area include: rimu (Dacrydium cupressinum), kahikatea (Dacrycarpus dacrydioides), manuka (Leptospermum scoparium), pate (Schefflera digitata), raupo (Typha orientalis), purei (Carex secta) and Carex geminata. An extensive planting programme is also planned for the large buffer margins of the retired area.

Fauna

The open water ponds have attracted a variety of wildlife with the most notable being the New Zealand dabchick *(Poliocephalus rufopectus)* (Nationally Vulnerable) and grey duck *(Anas superciliosa superciliosa)* (Nationally Critical).

Pied stilt (*Himantopus himantopus leucocephalus*) (At Risk) and the New Zealand pipit (*Anthus novaeseelandiae novaeseelandiae*) (At Risk) have also been recorded in this area. Common native bird species include: harrier hawk (*Circus approximans*), paradise shellduck (*Tadorna variegata*) and welcome swallow (*Hirundo neoxena*).

Fish surveys in this small catchment have also confirmed the presence of longfin eels (Anguilla dieffenbachii) (At Risk) and freshwater crayfish (Paranephrops planifrons) (At Risk). Freshwater mussels (Hyridella menziesii) (At Risk, Regionally Distinctive) are also suspected to be present.

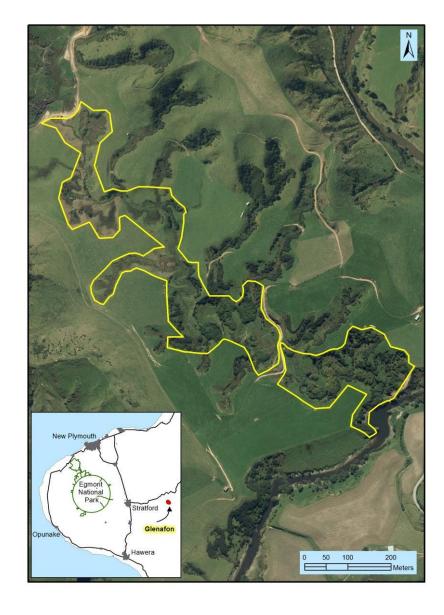


Ecological values

Ecological values	Rank	Comment	
Rarity and distinctiveness	High	Contains New Zealand dabchick (Poliocephalus rufopectus) (Nationally Vulnerable), grey duck (Anas superciliosa superciliosa) (Nationally Critical). Freshwater mussels (Hyridella menziesii) (At Risk, Regionally Distinctive are also believed to be present. Also contains, pied stilt (Himantopus himantopus leucocephalus) (At Risk), New Zealand pipit (Anthus novaeseelandiae novaeseelandiae) (At Risk) (Inglin eels (Anguilla dieffenbachii) (At Risk), freshwater crayfish (Paranephrops planifrons) (At Risk).	
Representativeness	High	Contains indigenous vegetation classified as 'Acutely Threatened' (F5.2a) and 'At Risk' (F7.2a) LENZ environments.	
Ecological context	Medium	Provides core habitat for specific indigenous species such as NZ dabchick and grey duck.	
Sustainability	Positive	Key ecological processes still influence the site and with appropriate management, it can remain resilient to existing or potential threats. The site has the additional benefit of being formally protected.	

Threats to ecological values	Potential threat	Comment
Pest animals	High	Possums, cats, mustelids, hedgehogs and rodents.
Weeds	Medium	Localised areas of barberry.
Habitat modification	Low	The area is completely fenced. Water levels are sustainable.

Site	protection	Yes/No	Description
A	Public ownership or formal agreement	Yes	The entire KNE area is in the process of gaining formal protection with a QEII Trust open space covenant.
В	Regulatory protection by local government	Yes	General regional or district rules might apply.
С	Active protection	Yes	A small scale predator control programme is in place for the site.



Kahouri Bush

At a glance (last updated: March 2013)			
TRC reference: Bl	D/7005	Ecological district:	Egmont
Other reference: QEII 5/06/156		LENZ environment:	F5.2a (2.8 ha)
Land tenure: Private		Protection status:	A, B, C
GPS:	E 1715488 N 5644761	Area:	2.8 ha

Location

The Kahouri Bush Key Native Ecosystem is located on private land approximately 4km east of Stratford in Central Taranaki.

General description

The Kahouri Bush Key Native Ecosystem comprises a covenanted area of flat native forest and steep riparian strips of native vegetation along the Kahouri stream and Patea River margins. The forest remnant is generally in good condition although weed threats are present. The main forest canopy is almost completely dominated by very large tawa with a diverse understorey of native saplings, seedlings and ferns. Kamahi and other native canopy species are more dominant along the river margin.

Although this forest remnant is reasonably small, it is nonetheless an important ecosystem due its presence in an area which is otherwise predominated by well-developed farmland. Forest remnants on the Egmont ring plain are now rare.

Ecological features

Flora

The main forest canopy is almost completely dominated by tawa (Beilschmiedia tawa). Other canopy tree species include miro (Prumnopitys ferruginea), kamahi (Weinmannia racemosa), hinau (Elaeocarpus dentatus), kahikatea (Dacrycarpus dacrydioides) and rimu (Dacrydium cupressinum). The forest understorey is in good condition since the exclusion of stock and includes lacebark (Hoheria sexstylosa), pate (Schefflera digitata), mahoe (Melicytus ramiflorus), climbing rata (Metrosideros diffusa, M. fulgens, M. perforata), kiekie (Freycinetia baueriana subsp. banksii) and Asplenium and Blechnum fern species.

Fauna

The covenanted area provides a small habitat for resident native forest birds such as the grey warbler (*Gerygone igata*) and fantail (*Rhipidura fuliginosa*). The forest is also is part of a wider foraging area for more mobile native birds in the area including New Zealand pigeon (*Hemiphaga novaeseelandiae*), tui (*Prosthemadera novaeseelandiae*) and silvereye (*Zosterops lateralis*). Forest remnants such as these contribute to forest connectivity in an agricultural landscape such as the Egmont ring plain.

Ecological values	Rank	Comment
Rarity and distinctiveness	Low	Not known to contain any Threatened or Regionally Distinctive species.
Representativeness	High	Contains indigenous vegetation classified as an 'Acutely Threatened' (F5.2a) LENZ environment.
Ecological context	Medium	Enhances connectivity between fragmented indigenous habitats.
Sustainability	Positive	Key ecological processes still influence the site and with appropriate management, it can remain resilient to existing or potential threats. The site has the additional benefit of being formally protected.

Threats to ecological values	Potential threat	Comment
Pest animals	Medium	Possums, cats, mustelids, hedgehogs and rodents.
Weeds	High	Old mans beard, cherry, ivy, burdock, climbing nightshade, Himalayan honeysuckle, wandering jew, convolvulus, tree strawberry, sycamore, etc.
Habitat modification	Low	Securely fenced with no other immediate threats.

Site	protection	Yes/No	Description
Α	Public ownership or formal agreement	Yes	The KNE area is protected with a QEII Trust open space covenant.
В	Regulatory protection by local government	Yes	General regional or district rules might apply.
С	Active protection	Yes	Is within the self help possum control programme.



Mimi Estuary

At a glance (last updated: March 2013)			
TRC reference:		Ecological district:	North Taranaki
Other reference:		LENZ environment:	Insufficient Map Data
Land tenure:	Crown:14.2ha	Protection status:	A, B, C
	Private: 4.4ha		
GPS:	E 1724760 N 5686243	Area:	18.6 ha

Location

The Mimi Estuary Key Native Ecosystem is located on crown and private land approximately 5.5km north east of Urenui in North Taranaki.

General description

The Mimi Estuary Key Native Ecosystem area consists of the Mimi riverine estuary, estuary margins and the main foreshore of sandy, driftwood areas to the immediate north and south of the river mouth. These combined areas contain a variety of rare habitat types, which in turn support a variety of rare native flora and fauna with high biodiversity values.

Ecological features

Flora

Small tidal bays within the estuary provide a rare habitat type for a variety of specialised native flora. Notable 'Regionally Distinctive' species include natural populations of saltmarsh ribbonwood (*Plagianthus divaricatus*), coastal tree daisy (*Olearia solandri*) and *Hebe stricta var. macroura*. Buffer margins around the estuary on the south side are present and contain a well established variety of mainly native plants. Native celery (*Apium prostratum*), jointed wire rush (Oioi) (*Apodasmia similis*), sea primrose (*Samolus repens*) and shore lobelia (*Lobelia anceps*) can all be found along the tidal margins of the estuary. A small population of Pingao (*Ficinia spiralis*) ('At Risk, Relict') has established from planting on the foreshore beach area on the porth side of the river

Fauna

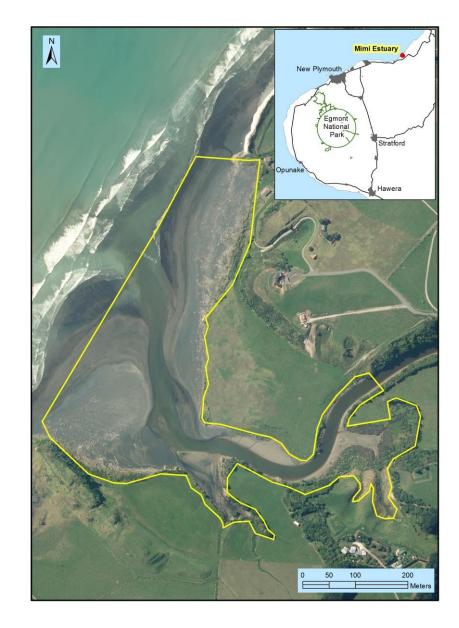
The Mimi Estuary KNE provides very important habitats for a diverse range of resident and migratory native fauna. Notable species recorded to date include the 'Threatened, Nationally Vulnerable' Northern New Zealand dotterel (Charadrius obscurus aquilonius), Caspian tern (Hydroprogne caspia) and red-billed gull (Larus novaehollandiae scopulinus). 'At Risk" species include the variable oystercatcher (Haematopus unicolor), royal spoonbill (Platalea regia), black shag (Phalacrocorax carbo novaehollandiae), little shag (Phalacrocorax melanoleucos), pied stilt (Himantopus himantopus leucocephalus) and little blue penguin (Eudyptula minor iredalei).

The Mimi River estuary and river also has a very diverse freshwater fauna. Notable 'At Risk" and 'Regionally Distinctive' freshwater fish such as giant kokopu (*Galaxias argenteus*) and banded kokopu (*Galaxias fasciatus*) are known in the mid reaches of the river and the estuary provides passage for these fish during their juvenile migratory phases.

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Contains 'Regionally Distinctive' flora species including saltmarsh ribbonwood, coastal tree daisy and <i>Hebe stricta var. macroura</i> . Also contains 'Threatened, 'Nationally Vulnerable' fauna species including the Northern New Zealand dotterel, Caspian tern and red-billed gull.
Representativeness	High	Currently off the mapped LENZ extent although similar environments classified as 'Acutely Threatened'.
Ecological context	Medium	Provides seasonal and core habitat for specific indigenous species.
Sustainability	Positive	Key ecological processes still influence the site and with appropriate management, it can remain resilient to existing or potential threats. The majority of the site has the additional benefit of being formally protected.

Threats to ecological values	Potential threat	Comment
Pest animals	High	Possums, cats, mustelids, hedgehogs and rodents.
Weeds	High	Areas of marram, pampas, Japanese walnut, gorse and gunnera.
Habitat modification	Medium to Low	Currently securely fenced for stock exclusion although popular area for recreation and human impacts. Vulnerable changing coastal ecosystem, especially due to exposure to severe weather, erosion and sea events.

Site	protection	Yes/No	Description
Α	Public ownership or formal agreement	Yes	In Part: Crown land (foreshore) and private.
В	Regulatory protection by local government	Yes	General regional or district rules might apply.
С	Active protection	Yes	Extensive fencing and planting of buffer margins on private land.



Mudfish 3

At a glance (last updated: March 2013)			
TRC reference:		Ecological district:	Egmont
Other reference:		LENZ environment:	F5.2a (0.9 ha)
Land tenure:	Private	Protection status:	A, B, C
GPS:	E 1716751 N 5637913	Area:	0.9 ha

Location

The Mudfish 3 wetland is located on private land near the Cheal Road and Oru Road intersection, approximately 6.5 kilometres northeast of Eltham in the Egmont Ecological District.

General description

The Mudfish 3 wetland covers 0.9 ha and is made up of a compact, spring fed swamp on the valley floor. This retired paddock has been modified with extensive earthworks to enhance the habitat in this area specifically for Brown Mudfish (*Neochanna apoda*). Small semi ephemeral ponds and hollows have been created throughout the western side of the area and enhancement planting with suitable native flora species has been undertaken. Native ground cover (rushes etc.) continues to recover since stock have been excluded and this vegetation type now dominates the majority of the area. The wetland is recovering well and is in generally good ecological condition.

Although this wetland is small, it is nonetheless an important ecosystem and habitat type in an area which is otherwise dominated by well-developed, high productivity farmland.

Ecological features

Vegetation

Natural vegetation at the site is mainly confined to sedges (*Carex* spp.) although enhancement planting of other native flora has been undertaken. Enhancement planting species include suitable indigenous wetland flora, such as karamu (*Coprosma robusta*), wineberry (*Aristotelia serrata*), cabbage tree (*Cordyline australis*), flax (*Phormium tenax*), koromiko (*Hebe stricta*), purei (*Carex secta*), white pine (*Dacrycarpus dacrydiodes*), lemonwood (*Pittosporum eugeinoides*),

five finger (Pseudopanax arboreus), toetoe (Cortaderia fulvida), lacebark (Hoheria sexstylosa) etc.

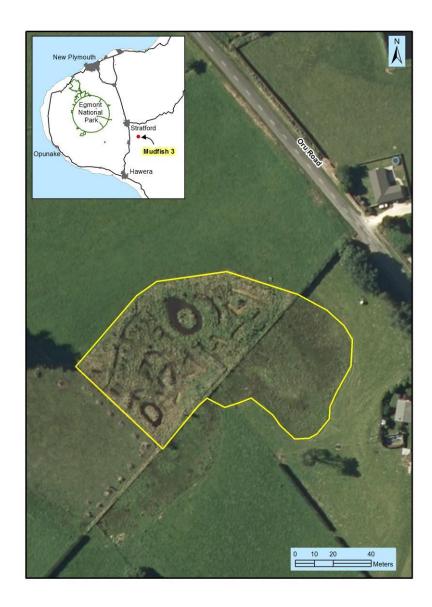
Fauna

The enhancement of this wetland is specifically aimed at creating a secure habitat for Brown mudfish (Neochanna apoda) ('Regionally Distinctive' and 'At Risk, Declining'). Brown mudfish are present and should eventually occupy all of the recently created ponded areas. Wetland birds are also present such as pukeko (Porphyrio porphyria), and other waterfowl use the small ponds. Once the enhancement planting is established and of greater size, the area will provide valuable habitat for other native bird species. Threatened and At Risk reptile species are also known in the local area and may be present.

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Contains the 'Regionally Distinctive" and "At Risk, Declining' Brown Mudfish.
Representativeness	Medium	Contains a small example (0.9ha) of indigenous vegetation classified as an 'Acutely Threatened' (F5.2a) LENZ environment
Ecological context	Medium	Provides core habitat for regionally distinctive indigenous species, brown mudfish. The area will also provide valuable habitat for threatened reptiles and wetland birds once enhancement planting becomes established
Sustainability	Positive	Key ecological processes still influence the site and with appropriate management, it can remain resilient to existing or potential threats.

Threats to ecological values	Potential threat	Comment
Pest animals	Medium	Possums, cats, mustelids, hedgehogs and rats.
Weeds	High	Willow.
Habitat modification	Medium	Currently well fenced and stock are excluded from the area. Stock would cause significant damage if fence damaged.

Site	Site protection Y		Description
A	Public ownership or formal agreement	Pending	The landowner where enhancement work has been undertaken has applied for a QEII covenant for the area.
В	Regulatory protection by local government	Yes	General regional or district rules might apply.
С	Active protection	Yes	Completely fenced. Part of the Self-help Possum Control Programme.



Putere Wetlands

At a glance (last updated: March 2013)			
TRC reference:		Ecological district:	Matemateaonga
Other reference:		LENZ environment:	F7.2a (1.8 ha)
			F5.2a (0.3 ha)
Land tenure:	Private	Protection status:	A, B, C
GPS:	E 1733704 N 5652598	Area:	2.1 ha

Location

The Putere Wetlands Key Native Ecosystem is located on private land approximately 1km west of Huiakama in East Taranaki.

General description

The Putere Wetlands Key Native Ecosystem area consists of both natural wetland areas and three, man-made, small to moderately sized ponds in a single gully system. Small areas of original native vegetation are present including a stand of kahikatea (*Dacrycarpus dacrydioides*). An enhancement planting programme of native vegetation around the buffer of the wetlands has been initiated to increase the wetland's sustainability and enhance the indigenous biodiversity values of the area.

Threatened wildlife such as the New Zealand dabchick are resident on the ponds and are breeding in the Putere wetlands. Other notable fauna are known in the area and will also inhabit this area as enhancement continues.

Ecological features

Flora

Flora species naturally found in the in this area include: kahikatea (*Dacrycarpus dacrydioides*), lacebark (*Hoheria sexstylosa*), pate (*Schefflera digitata*), mahoe (*Melicytus ramiflorus*), raupo (*Typha orientalis*), purei (*Carex secta*), *Carex geminata* and toetoe (*Cortaderia fluvida*).

Planted native vegetation includes: cabbage tree (Cordyline australis), mountain flax (Phormium cookianum) and purei (Carex secta).

Fauna

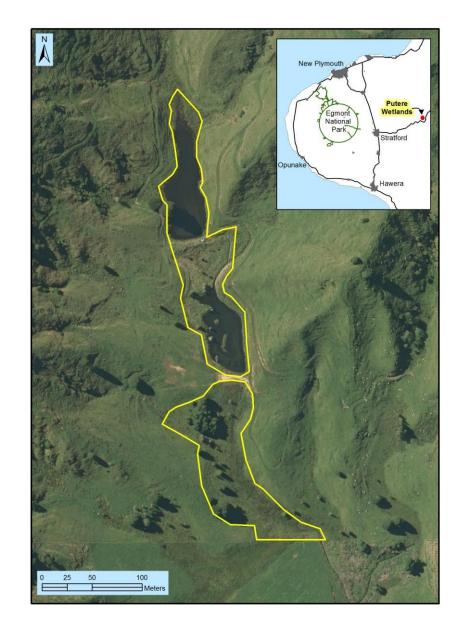
The open water ponds have attracted a variety of wildlife with the most notable being the New Zealand dabchick *(Poliocephalus rufopectus)* (Threatened, Nationally Vulnerable) and grey duck *(Anas superciliosa superciliosa)* (Threatened, Nationally Critical). The New Zealand pipit *(Anthus novaeseelandiae novaeseelandiae)* (At Risk) is also present in the wider area.

Common native bird species include: harrier hawk (*Circus approximans*), paradise shellduck (*Tadorna variegate*) and welcome swallow (*Hirundo neoxena*)

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Contains New Zealand dabchick (<i>Poliocephalus rufopectus</i>) (Nationally Vulnerable), grey duck (<i>Anas superciliosa superciliosa</i>) (Nationally Critical) and New Zealand pipit (<i>Anthus novaeseelandiae</i> novaeseelandiae) (At Risk).
Representativeness	Medium	Contains indigenous vegetation classified by LENZ as 'Acutely Threatened' (F5.2a) and 'At Risk' (F7.2a) environments.
Ecological context	Medium	Provides core habitat for threatened indigenous species such as NZ dabchick & grey duck.
Sustainability	Positive	Key ecological processes still influence the site and with appropriate management, it can remain resilient to existing or potential threats. The majority of the site has the additional benefit of being formally protected.

Threats to ecological values	Potential threat	Comment
Pest animals	High	Possums, cats, mustelids, hedgehogs and rodents.
Weeds	Medium	Localised areas of Himalayan honeysuckle.
Habitat modification	Medium to Low	Possible damage from stock in the uppermost unfenced pond. Water levels appear to be sustainable.

Site protection Yes/No		Yes/No	Description
Α	Public ownership or formal agreement	Yes	In Part: The majority of the KNE area is in the process of gaining protection with QEII Trust open space covenant.
В	Regulatory protection by local government	Yes	General regional or district rules might apply.
С	Active protection	Yes	The landowner has a localised animal control programme and has expressed interest to expand this work.



Scott Bush

At a glance (last updated: November 2012)				
TRC reference:		Ecological district:	Manawatu Plains	
Other reference: DOC Conservation Unit: 78006		LENZ environment:	F5.2c (9.2 ha)	
Land tenure:	Private	Protection status:	A, B, C	
GPS:	E 1720782 N 5614330	Area:	9.2 ha	

Location

The Scott Bush conservation covenant is located on private land approximately 10km south east of Hawera in South Taranaki.

General description

The Scott Bush covenanted area consists of a semi-coastal forest remnant in the top end of a small side gully system in the Manawapou Stream catchment. Scott Bush is in close proximity to other Key Native Ecosystems nearby such as the Tarere Conservation Area and Tarere Forest Extensions KNE.

Ecological features

Flora

This covenanted area contains a very good example of semi coastal/lowland forest (classified as an 'Acutely Threatened' forest ecosystem under LENZ environment F5.2C.), with a canopy consisting of tawa (*Beilschmiedia tawa*), miro (*Prumnopitys ferruginea*), pukatea (*Laurelia novae-zelandiae*), rewarewa (*Knightia excelsa*), northern rata (*Metrosideros robusta*), puriri (*Vitex lucens*), titoki (*Alectryon excelsus*) and karaka (*Corynocarpus laevigatus*). The forest is also very notable for some excellent examples of mature ngaio (*Myoporum laetum*) (Regionally Distinctive).

Fauna

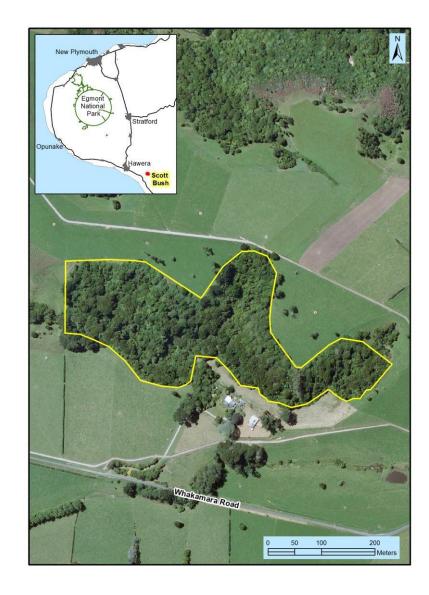
Native birdlife recorded in and around the covenanted area include the New Zealand pigeon (*Hemiphaga novaeseelandiae*), grey warbler (*Gerygone igata*), fantail (*Rhipidura fuliginosa*), bell bird (*Anthornis melanura*), tui (*Prosthemadera novaeseelandiae*) and morepork (*Ninox novaeseelandiae*).

Koura (*Paranephrops planifrons*) (At Risk, Declining) are present in the small stream system within the covenanted area.

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Contains the 'At Risk' koura (<i>Paranephrops planifrons</i>) and the 'Regionally Distinctive' ngaio (<i>Myoporum laetum</i>).
Representativeness	High	Contains indigenous vegetation classified as an 'Acutely Threatened' (F5.2c).LENZ environment.
Ecological context	Medium	Provides additional habitat and greater connectivity with other Key Native Ecosystems in this area such as the Tarere Conservation Area.
Sustainability	Positive	Key ecological processes still influence the site and with appropriate management, it can remain resilient to existing or potential threats. The site has the additional benefit of being formally protected.

Threats to ecological values	Potential threat	Comment
Pest animals	High	Possums, goats, cats, mustelids, hedgehogs and rodents.
Weeds	High	Scattered areas of pampas, climbing asparagus, barberry, buddleia, cathedral bells, ivy and wild ginger.
Habitat modification	High	Currently fenced although not stock proof. Needs urgent maintenance to exclude stock from the area.

Site	protection	Yes/No	Description
A	Public ownership or formal agreement	Yes	Covered by a Department of Conservation covenant.
В	Regulatory protection by local government	Yes	General regional or district rules might apply.
С	Active protection	Yes	Occasional pest animal control for possums.



Victoria Street

At a glance (last updated: November 2012)					
TRC reference:		Ecological district:	Foxton		
Other reference:		LENZ environment:	C3.1b (1.1 ha)		
			F1.3b (0.2 ha)		
			F4.1a (10.0 ha)		
			J4.2a (11.6 ha)		
Land tenure:	Crown: 12.0ha	Protection status:	A, B		
	Private: 17.9ha				
GPS:	E 1725129 N 5597925	Area:	22.9 ha		

Location

The Victoria Street Key Native Ecosystem is located on crown (Victoria Conservation Area) and private land approximately 1km west of Patea in South Taranaki.

General description

The Victoria Street Key Native Ecosystem area consists of steep coastal cliffs terminating into the Tasman Sea, cliff-top hummocky dunes and areas of rough pasture. This coastal marginal area contains a variety of rare habitats classified under LENZ environments, which in turn contain an assemblage of rare and endemic native flora and fauna with high biodiversity value.

Ecological features

Flora

Damp and eroding cliff faces in this area provide a microhabitat for a variety of specialised native flora. Notable species recorded to date include *Leptinella dispersa* subsp. *rupestris* ('At Risk, Naturally Uncommon), *Limosella lineata* ('Nationally Critical') and native sow thistle (*Sonchus kirkii*) ('At Risk, Relict'). Other coastal native flora along the cliffs and dune area incudes sand celery (*Apium prostratum*), shore bindweed (*Calystegia soldanella*), wire weed (*Muehlenbeckia complexa*), and oioi (*Leptocarpus similis*) etc.

Fauna

A variety of native fauna is likely to be present in this rare habitat type, although this is relatively unstudied. A notable species known to be present at his site is the Southern North Island speckled skink *(Oligosoma aff. infrapunctatum)* (Threatened, 'Nationally Vulnerable').

Ecological values	Rank	Comment	
Rarity and High distinctiveness		Contains the Southern North Island speckled skink (Oligosoma aff. infrapunctatum) (Threatened, 'Nationally Vulnerable').	
		Also contains Leptinella dispersa subsp. rupestris ('At Risk, Naturally Uncommon), Limosella lineata ('Nationally Critical'), native sow thistle (Sonchus kirkii) ('At Risk, Relict')	
Representativeness	High	Contains indigenous vegetation classified as 'Acutely Threatened' (C3.1b & J4.2) LENZ environments. Historically rare ecosystem containing assemblages of rare and endemic native flora and fauna.	
Ecological context	Medium	Provides a variety of rare habitats that are core habitat for a range of threatened indigenous species.	
Sustainability Positive		Key ecological processes still influence the site and with appropriate management, it can remain resilient to existing or potential threats. The majority of the site has the additional benefit of being formally protected.	

Threats to ecological values	Potential threat	Comment
Pest animals	High	Possums, cats, mustelids, hedgehogs and rodents.
Weeds	Medium	Wider areas of marram and scattered areas of boxthorn and lupin.
Habitat modification	Medium to High	Further modification of this habitat for pastoral use will threaten the ecological values. Fencing and habitat enhancement will reverse this trend at the site.

Site protection		Yes/No	Description
Α	Public ownership or formal agreement	Yes	In Part: The majority of the KNE area is Public Conservation Estate (Victoria Conservation Area).
В	Regulatory protection by local government	Yes	General regional or district rules might apply.
С	Active protection	No	The Department of Conservation are considering options for this area.

