

Sandy Bay

At a glance (last updated: February 2006)			
TRC reference:		Ecological district:	Egmont
Other reference:	STDC SNA 5 QEII 5/06/159	LENZ environment:	G1.1d
Land tenure:	Crown, district and private land	Protection status:	A, B, C
GPS:	2578000E – 6200200N	Area:	35.6 ha

Location

Sandy Bay is located approximately 9 km north-west of Opunake, and is within the Egmont Ecological District. The foreshore and adjacent Recreation Reserve are Crown land administered by the Department of Conservation with support from the local community and Shell Todd Oil Services Ltd. Parts of the dune system also extend onto private land and include a local purpose reserve and recreation reserve both of which are administered by the South Taranaki District Council.

General description

Sandy Bay is a largely unmodified area. This 35.6 ha site is the only significant remaining area of coastal sand dunes in the Egmont Ecological District.

The dune system is relatively unstable – prone to wind erosion and eroding inland. In the past the Taranaki Catchment Commission (the Taranaki Regional Council's predecessor) carried out extensive soil conservation works in the area to prevent the spread of sand onto adjoining productive dairy pasture. There is an Urupa (burial ground) near the middle of the area, which is an important Maori heritage site.

Ecological features

Vegetation

The main sand dune area has been retired from grazing and is vegetated with marram grass (*Ammophila arenaria*), spinifex (*Spinifex sericeus*), lupin (*Lupinus* species), sand coprosma (*Coprosma acerosa*), sedges, and rushes. Some pingao (*Desmoschoenus spiralis*), which is identified as 'Chronically threatened (Gradual Decline)', is also present.

Pinatoro (*Pimelea prostrata* var. *urvilleana*) is present on the south boundary of the dune system. This plant is significant as it provides habitat for the *Notoreas* 'Taranaki' moth.

Fauna

Sandy Bay is a significant wildlife area and contains a diverse range of threatened and rare species.

The Beach is an important breeding area for New Zealand dotterel (*Charadrius obscurus*) and the variable oyster catcher (*Haematopus unicolor*), which are both identified as 'Acutely Threatened (Nationally Vulnerable)'. Several other notable bird species have also been recorded at the site, including the 'Acutely Threatened (Nationally Vulnerable)' reef heron (*Egretta sacra sacra*), and the 'Chronically Threatened (Gradual Decline)' banded dotterel (*Charadrius bicinctus bicinctus*). Black-backed gull (*Larus dominicanus*) is also present.

The surrounding scrublands also provide habitat and contain the green gecko (*Naultinus* species) and gold-striped gecko (*Hoplodactylus chrysoireticus*), both of which are identified as 'Chronically Threatened (Gradual Decline)'.

The local purpose and recreational reserves on the south boundary of the dune system provide habitat of the *Notoreas* 'Taranaki' an endemic moth that lives on the *Pimelea prostrata* var. *urvilleana*. This moth is only found in south Taranaki (at four known sites) and north-west Nelson.

Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Contains the 'Acutely Threatened' New Zealand dotterel and reef heron, and the moth <i>Notoreas</i> 'Taranaki' (which is only found in south Taranaki and north-west Nelson) Also contains the 'Chronically Threatened' banded dotterel, green gecko, gold-striped gecko and pingao (<i>Desmoschoenus spiralis</i>)
Representativeness	Medium	Contains indigenous vegetation on G1.1d – an 'At Risk' LENZ environment
Ecological context	High	Only significant remaining area of coastal sand dunes in the Egmont Ecological District. The beach provides breeding and core habitat for a wide variety of threatened and rare flora 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

Oaonui Beach has the following additional values:

- Recreational: the beach is internationally renowned for surfing and windsurfing. The coastline is also a popular surf casting spot and provides for a range of active and passive recreational experiences
- Cultural: several pa and occupation sites, as well as a spiritually significant Urupa (burial ground), are present
- Historical: The shipwreck 'Northern Monarch' lies offshore.

Management threats and response

Potential and actual threats to the sustainability of Oaonui Beach'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. New subdivisions in the area may be an issue with pet cats and dogs preying on threatened fauna
Weeds	Low	Boxthorn
Habitat modification	Medium to high	Vehicles (motorbikes) damage to dunes, nesting sites, plants and the Urupa Coastal erosion

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

Site protection	Yes/No	Description
A Public ownership or formal agreement	Yes	Crown land (foreshore and Recreation Reserve) District Council reserve (Local Purpose Reserve and Recreation Reserve) QEII Covenant (1 of 2 owners)
B Regulatory protection by local government	Yes	Site specific rules apply – South Taranaki District Council rules for Significant Natural Areas (refer Schedule II of the District Plan) General regional or district rules might also apply
C Active protection	Yes	Partially fenced Self-help Possum Control Programme Weed control



Saunder's Road Forest

At a glance (last updated: February 2006)			
TRC reference:		Ecological district:	Egmont
Other reference:	NPDC SNA 32	LENZ environment:	F5.3b
Land tenure:	Private	Protection status:	B, C
GPS:	2593148E – 6217517N	Area:	114.8 ha

Location

The Saunder's Road Forest is located on privately owned land, 8km south west of Inglewood. It lies in the Egmont Ecological District.

General description

The Saunder's Road Forest is a large remnant (114.8 ha) of previously logged lowland forest on debris flows adjoining the Egmont National Park.

The forest canopy is dominated by kamahi but with succession this area will regenerate to include a greater range of species. The forest is believed to be an important bird habitat and feeding area, particularly during the winter.

Ecological features

Vegetation

The Saunder's Road Forest is a kamahi (*Weinmannia racemosa*) dominant lowland forest with hinau (*Elaeocarpus dentatus*) as a common associate. Emergent trees include rata (*Metrosideros robusta*) and tawa (*Beilschmiedia tawa*).

Tawa reaches its altitudinal limit near the boundary of the Egmont National Park. Therefore, the vegetation at this site extends over this ecotone and provides lower altitude forest as habitat for wildlife.

Fauna

No specific indigenous fauna species have been recorded for the Saunder's Road Forest. However, New Zealand pigeon (*Hemiphaga novaeseelandiae*), which is identified as 'Chronically Threatened (Gradual Decline)' is known to be present in adjoining areas and undoubtedly uses this forest.

Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	Medium	Likely to contain the 'Chronically Threatened' New Zealand pigeon
Representativeness	Low	High quality example of indigenous vegetation on LENZ environment that is not threatened
Ecological context	High	Relatively large area contiguous with Egmont National Park It provides a buffer and enhances the ecological values of the National Park by extending the altitudinal range
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 Saunder's Road Forest's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Low to medium	Possums, goats, cats, mustelids, and rats
Weeds	Low	
Habitat modification	Moderate	Large area but unfenced. Grazing by wandering livestock causes damage to the understorey and seedlings, particularly around the margins

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

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



Spence Road Pond

At a glance (last updated: February 2006)

TRC reference:	0990-0	Ecological district:	Foxton
Other reference:		LENZ environment:	F5.2c
Land tenure:	Private	Protection status:	A, B, C
GPS:	2632385E – 6165511N	Area:	15.8 ha

Location

The Spence Road Pond is located on privately owned land, 2 km west of Kakaramea. The pond lies in the Foxton Ecological District.

General description

The Spence Road Pond is a small lacustrine wetland covering 15.8 ha and is located close to the coast. In the past, the Pond used to be a sanctuary.

Ecological features

Vegetation

Vegetation within the wetland includes raupo (*Typha orientalis*) and sedges (including *Carex virgata* and *Cyperus ustulatus*). Flax (*Phormium tenax*) and willows (*Salix* sp.) can also be found in the upper regions.

Fauna

Unknown. No specific indigenous fauna species have been recorded for Spence Road Pond. However, the wetland is likely to be used by a range of waterfowl (as is the case for other lakes in the area) with birds moving frequently between sites.

Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	Low	Not known to contain any 'Acutely Threatened' species or species uncommon in Taranaki
Representativeness	High	Contains indigenous vegetation on F5.2c – an 'Acutely Threatened' LENZ environment
Ecological context	MediumHigh	Close to the coast and other small lakes and wetlands in the vicinity

Sustainability	Positive	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 Spence Road Pond'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 gorse
Habitat modification	Low	Formally protected (in part) and fenced

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

Site protection	Yes/No	Description
A Public ownership or formal agreement	Yes	In part: Taranaki Regional Council Memorandum of Encumbrance (covering 1 of 2 land owners)
B Regulatory protection by local government	Yes	General regional or district rules might apply
C Active protection	Yes	The wetland is fenced Enhancement planting with native species



Stent Road Beach

At a glance (last updated: February 2006)		
TRC reference:	Ecological district:	Egmont
Other reference:	LENZ environment:	C1.3a (0.1 ha) F5.2b (1.0 ha) G1.1d (1.5 ha) H1.3a (1.2 ha)
Land tenure:	Crown	Protection status:
GPS:	2577224E – 6219960N	A, B Area: 3.8 ha

Location

Stent Road Beach is located 7.5 km south of the Stony River and 7 km north of Pungarehu. The site is within the Egmont Ecological District.

General description

The Stent Road Beach is 3.8 ha in area and includes a coastal herbfield (less than 0.5 ha) adjacent to the sea. The foreshore is Crown land administered by the Department of Conservation.

Ecological features

Vegetation

Vegetation within the coastal herbfield includes the recently discovered coastal cress *Lepidium flexicaule*. This plant is listed as 'Acutely Threatened (Nationally Vulnerable)' and is the only known natural location for the plant outside of the west Nelson – north Westland area.

The succulent *Crassula manaia*, endemic to the Egmont – Waverley coast, is also present and is identified as 'Chronically Threatened (Gradual Decline)'. Other plants present in the herbfield include the unnamed *Oreomyrrhis* species and *Plantago triandra* var. *P. masonae*.

Fauna

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

Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Contains the 'Acutely Threatened' coastal cress (<i>Lepidium flexicaule</i>) and the 'Chronically Threatened' <i>Crassula manaia</i> (which is endemic to Taranaki)
Representativeness	High	Contains indigenous vegetation on 'Acutely Threatened' (C1.3a, F5.2b, H1.3a) and 'At Risk' (G1.1d) LENZ environments
Ecological context	High	Provides buffering and core habitat for threatened flora 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

Stent Road Beach is one of the top New Zealand surf breaks and is recognised as having regionally significant coastal amenity values.

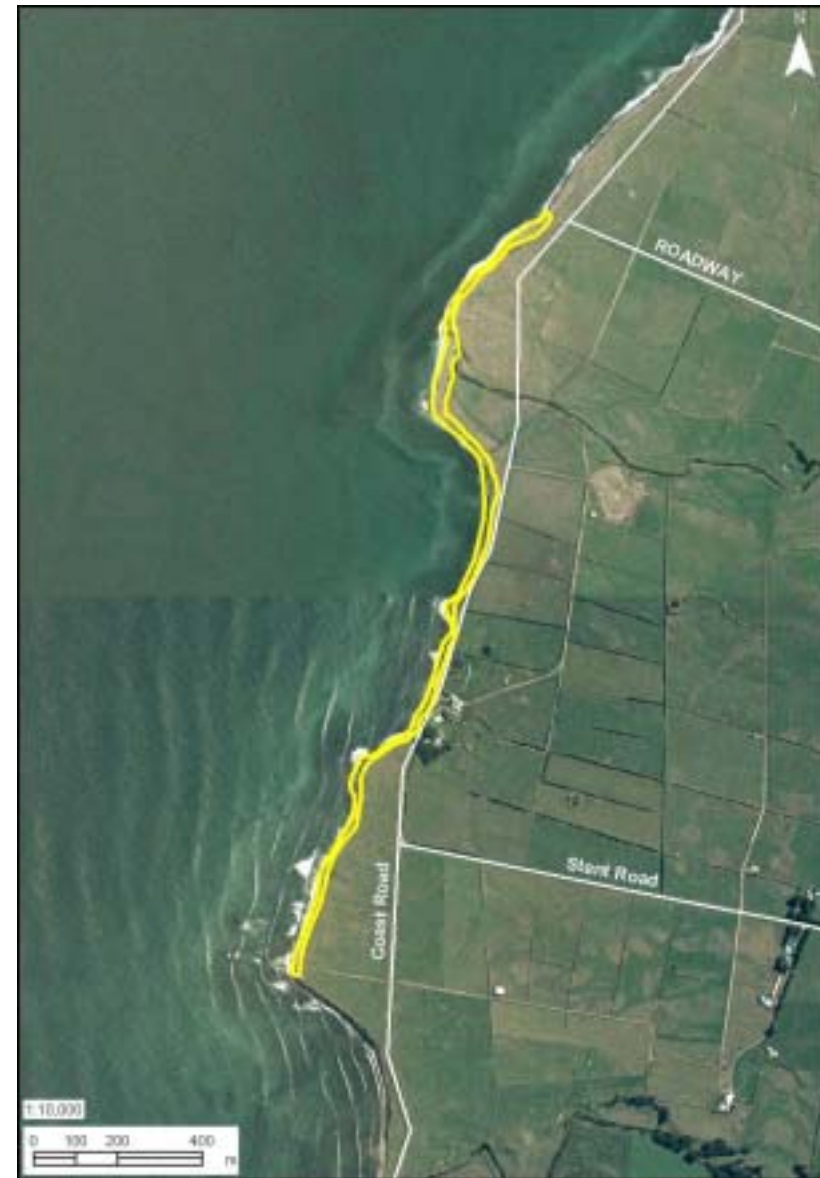
Management threats and response

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

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

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

Site protection		Yes/No	Description
A	Public ownership or formal agreement	Yes	Crown land (foreshore)
B	Regulatory protection by local government	Yes	General regional or district rules might apply
C	Active protection	No	



Stent Road Bush

At a glance (last updated: February 2006)			
TRC reference:		Ecological district:	Egmont
Other reference:	STDC SNA 8 QEII 5/06/155	LENZ environment:	F5.2b (2.4 ha) H1.3a (0.3 ha)
Land tenure:	Private	Protection status:	A, B
GPS:	2579800E – 6218400N	Area:	2.7 ha

Location

Stent Road Bush is located on privately owned land, 8 km south-west of Okato. It lies in the Egmont Ecological District.

General description

Stent Road Bush is a small (2.7 ha) semi-coastal forest remnant, located adjacent to the Warea River, 2 km from the coast. The site consists of vegetation types that are now rare in the Egmont Ecological District. The Stent Road Bush site includes private land, which is covered by a QEII Covenant, as well as some Crown and District Council land.

Ecological features

Vegetation

The forest remnant consists of pukatea (*Laurelia novaezealandiae*) emergent over a canopy of karaka (*Corynocarpus laevigatus*), kohekohe (*Dysoxylum spectabile*), nikau (*Rhopalostylis sapida*), and kaikomako (*Pennantia corymbosa*).

There is also a fenced area that has a thick undergrowth of nikau (*Rhopalostylis sapida*), supplejack (*Ripogonum scandens*), kohekohe (*Dysoxylum spectabile*), kaikomako (*Pennantia corymbosa*), mahoe (*Melicytus ramiflorus*) and lancewood (*Pseudopanax crassifolius*), as well as tree ferns. The unfenced area has a depleted understory and little ground cover as a result of grazing.

Fauna

Notable birdlife present includes New Zealand pigeon (*Hemiphaga novaezealandiae*), which is identified as 'Chronically Threatened (Gradual Decline)'. Tui (*Prosthemadera novaeseelandiae*) and bellbird (*Anthornis melanura*) are also present at Stent Road Bush.

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 and H1.3a – an 'Acutely Threatened' LENZ environments
Ecological context	Low	Very few areas of indigenous forest in vicinity
Sustainability	Positive	In fair but improving vegetative condition. Because of its small size edge effects will always influence the site but under appropriate management, it can remain resilient to existing or potential threats

Management threats and response

Potential and actual threats to the sustainability of Stent 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	Medium	Wandering willy
Habitat modification	Medium to high	Stock grazing

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

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



Sugar Loaf Islands Marine Protected Area

At a glance (last updated: February 2006)			
TRC reference:	Ecological district:	Egmont	
Other reference:	LENZ environment:*	A7.2c (1.4 ha)	D2.1b (3.9 ha)
Land tenure:	Crown	Protection status:	A, B, C
GPS:	2597904E – 6239437N	Land area:	5.3 ha
		Total area:	752.5 ha

* LENZ environments do not extend to coastal waters

Location

The Crown owned Sugar Loaf Islands Marine Protected Area (SLIMPA) is located on the North Taranaki coast just offshore from New Plymouth. The islands lie in the Egmont Ecological District.

General description

The Sugar Loaf Islands Marine Protected Area comprises of five islands, two rock groups, seabed, foreshore and water, and covers an area of 752.5 ha. The islands are a unique feature on the Taranaki – Manawatu coastline.

The two largest 'outer' islands are Motumahanga (Saddleback) (1.2 ha) and Moturoa (1.4 ha). These islands lie the furthest offshore, have a high degree of naturalness, and provide important habitats for nesting birds.

Whareumu (Lion Rock) consists of a small stack with a vegetated cap and two barren rocks nearby. Tokomapuna (Barrett Reef) lies between Moturoa and Motumahanga, and Waikaranga (Seal Rock) lies furthest from the coast.

Just west of Paritutu,



lie the three small 'inner' islands. Mataora (Round Rock) (0.7 ha), which is connected to the beach from mid to low tide. Twenty metres off Mataora, lies Pararaki (Seagull Rock) (0.8ha), permanently separated by a sea channel. The western-most island in the group is Motuotamatea (Snapper Rock) (1.2 ha), which is connected to the beach on very low spring tides. Mataora shows evidence of recent modification by fire.

An application has been made for a marine reserve for part of SLIMPA and an area to the south.

Ecological features

Vegetation

The 'outer' Sugar Loaf Islands (these being Motumahanga and Moturoa Islands) support 49 indigenous and 30 introduced plant species. The most common vegetation is taupata scrub (*Coprosma repens*), with flax (*Phormium tenax*) and emergent karo (*Pittosporum crassifolium*), and cabbage trees (*Cordyline australis*). Groundcover is quite sparse and is dominated by local patches of small ferns. Wire vine (*Muehlenbeckia complexa*) is common among the taupata canopy on Motumahanga. Cook's scurvy grass (*Lepidium oleraceum*) is present on the steep rock slopes of both islands. This perennial herb is almost extinct on the New Zealand mainland, as it is highly palatable to animals. It is classified as an 'Acutely Threatened (Nationally Endangered)' species.

The 'inner' Sugar Loaf Islands (these being Mataora, Motuotamatea and Pararaki Islands) have modified plant communities that are similar to vegetation on the adjacent mainland. Taupata forest dominates the summit of Parahaki Island. Karo, flax, coastal herbfields, and grassfields are also present.

The northern and western slopes of Mataora Island are dominated by flax/rush communities and herbfields and grassfields. Mixed pohutukawa (*Metrosideros excelsa*) with an understorey of flax is restricted to the southern and lower eastern slopes of the island.

The dominant vegetation on Motuotamatea Island is pohutukawa – karo – flax rush / herbfield and grasses. There are also stands of karo forest on the south-eastern and north-western sides of the island. The pohutukawa and karo on the island were undoubtedly originally planted even though they have now naturalised at the site. The shore spurge *Euphorbia glauca* is also

present. This species is identified as 'Chronically Threatened (Serious Decline)' nationally.

Fauna

The Sugar Loaf Islands provide an important environment for 11 species of sea birds. The two predator-free outer islands, in particular, are a major seabird breeding habitat. Approximately 17,000 seabirds nest on the Sugar Loaf Islands annually and this makes the Islands the most important location for seabirds on the Taranaki – Manawatu coastline.

Breeding seabirds include 'Chronically Threatened (Gradual Decline)' white-fronted tern (*Sterna striata*), flesh-footed shearwater (*Puffinus carneipes*) and sooty shearwater (*P. griseus*). Of note, the islands are the only known breeding colony of sooty shearwater between Kapiti Island in the south and the Three Kings Islands in the north and they provide the largest flesh-footed shearwater breeding colony on the west coast of the North Island.

Other seabirds known to breed on the Islands are fluttering shearwater (*P. gavia*), diving petrels (*Pelecanoides urinatrix urinatrix*) and white-faced storm petrels (*Pelagodroma marina*). The diving petrel breeding colony is the largest for this species on the west coast of the North Island.



Reef heron (*Egretta sacra*), which is identified as 'Acutely Threatened (Nationally Vulnerable)' have been breeding on Whareumu over the last 15 years. Black shag (*Phalacrocorax carbo*), which is identified as 'At Risk (Sparse)', also frequents the islands in small numbers.

The 'inner' islands also provide nesting habitat for a number of seabird species. These include the threatened white-fronted tern and southern black-backed gull (*Larus dominicanus*). Grey-faced petrel (*Pterodroma macroptera gouldi*) burrows are also present.

It is likely that there are lizards on the islands, as rat-free islands generally have the highest density and diversity of reptiles in New Zealand. However, a spotlight survey on Motumahanga in the mid 1990s found no lizards.

In terms of invertebrates, the *Tenebrionid* beetle is abundant on both Moturoa and Motumahanga Islands. The native snail *Paralaoma caputspinulae* have been recorded on Moturoa Island. The common garden snail (*Helix aspersa*) has also been recorded on this Island. The native snail *Rhytida greenwoodi* has been observed on Motuotamatea Island.

The adjacent waters are an important breeding and habitat site for marine mammals. The New Zealand fur seal (*Arctocephalus forsteri*) breeding population of the Sugar Loaf Islands is the northern most breeding colony in New Zealand. The 'Acutely Threatened (Nationally Critical)' killer whale (*Orcinus orca*) and the hector's dolphin (*Cephalorhynchus hectori*) (Nationally Endangered) are occasionally observed in the area. Common dolphin (*Delphinus delphis*), pilot whales (*Globicephala melaena*) and humpback whales (*Megaptera novaeangliae*) have also been observed. The oceanographic conditions and physical features around the Sugar Loaf Islands provide a diverse range of underwater habitats that are unique to Taranaki. There are 79 species of fish and 65 species of encrusting sponges recorded within the SLIMPA. The sponges are one of the major groups of encrusting organisms.

A variety of coelenterates (hydroids and anemones) also occur in this area, including the hydroid *Solanderia* species, the jewel anemone (*Corynactis haddonii*) and another anemone, *Actinothoe albocincta*. Twenty species of bryozoans and nine species of nudibranch (sea slugs) have been identified around the islands. Other common marine fauna include rock lobster (*Jasus edwardsii*), common crabs, hermit crabs, echinoderms, and molluscs.

Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Contains the 'Acutely Threatened' Cook's scurvy grass and reef heron. The 'Acutely Threatened' killer whale and Hector's dolphin are also observed occasionally in the area The New Zealand fur seal colony is distinctive in that it is the northern most seal breeding colony in New Zealand
Representativeness	High	Contains indigenous vegetation on 'Acutely Threatened' (A7.2c) and 'Chronically Threatened' (D2.1b) LENZ environments. Less than 10% of the marine area is in Reserve
Ecological context	High	The islands are a unique feature on the Taranaki – Manawatu coastline. The terrestrial and marine island ecosystems interact. Also provides an important breeding and core habitat for a large number of threatened indigenous flora and fauna species
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

Other Values

The Sugar Loaf Islands Marine Protected Area also has the following additional values:

- **Recreation:** The area is a regionally significant recreational area providing for a variety of recreational experiences including boating, kayaking, fishing and scuba diving.
- **Scientific:** The islands represent the eroded remnant of early Quarternary (Lower Pleistocene) volcanic activity in the Taranaki Area. The islands are rated as nationally significant in the Geopreservation Inventory and are considered to be a mineral (taranakite) locality of international importance. The islands also contain a variety of uncommon flora and fauna of scientific interest.
- **Cultural:** The islands are of cultural and spiritual significance to Māori. With the exception of Pararaki, each of the islands has been occupied in the past by people of Te Atiawa and Taranaki iwis. The islands and adjacent mainland were often the site of battles. More than eight archeological sites and two Urupa (burial site) have been identified in the wider area of the Sugar Loaf Islands and associated reefs.
- **Other:** The islands are 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 the Sugar Loaf Islands' ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Low	Possums and rats are present on the 'inner' islands
Weeds	Low to medium	Threat of the sea weed <i>Undaria</i> being carried by recreational and commercial boats into the protected area. Boxthorn on islands
Habitat modification	Medium	Formally protected. Pohutukawa and karo not natural to area

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

Site protection	Yes/No	Description
A Public ownership or formal agreement	Yes	Public Conservation Estate (Marine Protected Area)
B Regulatory protection by local government	Yes	Regional rules District rules
C Active protection	Yes	Pest and weed control (except for Mataora Island)



Surrey Hill Road Forest

At a glance (last updated: February 2006)	
TRC reference:	Ecological district: Egmont
Other reference: NPDC SNA 29	LENZ environment: F5.2b (44.4 ha) F5.3b (29.7 ha) F6.2a (3.9 ha)
Land tenure: Private	Protection status: B, C
GPS: 2596030E – 6227141N	Area: 78.2 ha

Location

The Surrey Hill Road Forest is located on privately owned land, 4.9 km east of Okato. It lies in the Egmont Ecological District.

General description

The Surrey Hill Road Forest is a large remnant (78.2 ha) of tawa - pukatea forest on debris flows between the Egmont National Park on the Kaitake Range and the Oakura River, which forms a natural boundary. The forest is younger than that in the adjacent National Park and is believed to be an important bird habitat, particularly in winter months.

Ecological features

Vegetation

The Surrey Hill Road Forest is a tawa (*Beilschmiedia tawa*) – kamahi (*Weinmannia racemosa*) dominant lowland forest. There is also a small area of earlier successional rewarewa (*Knightia excelsa*) and mamaku (*Cyathea medullaris*) forest.

Fauna

No specific indigenous fauna species have been recorded for the Surrey Hill Road Forest. However, New Zealand pigeon (*Hemiphaga novaeseelandiae*), which is identified as 'Chronically Threatened (Gradual Decline)' is known to be present in adjacent forest and undoubtedly uses this forest.

Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	Medium	Not known to contain 'Acutely Threatened' species or species uncommon to Taranaki. Likely to contain 'Chronically Threatened' New Zealand pigeon
Representativeness	High	Contains indigenous vegetation on F5.2b – an 'Acutely Threatened' LENZ environment
Ecological context	High	Relatively large area contiguous with Egmont National Park. It provides a buffer to the river 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

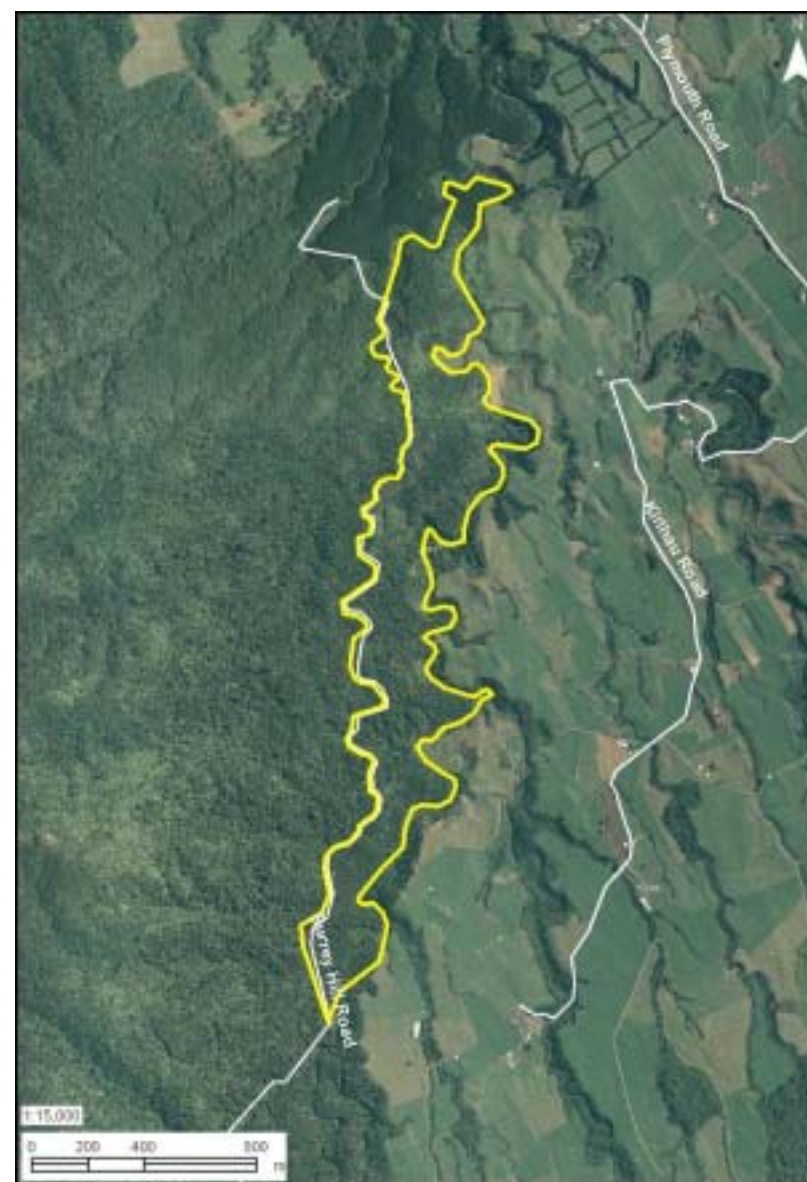
Management threats and response

Potential and actual threats to the sustainability of the Surrey Hill Road Forest's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Low to medium	Possums, goats, cats, mustelids, and rats
Weeds	Low	
Habitat modification	Moderate	The site is unfenced but the Oakura River provides a natural buffer

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

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



Sutherland/Normanby Road Ends

At a glance (last updated: February 2006)		
TRC reference:	Ecological district:	Egmont
Other reference:	LENZ environment:	F5.2c
Land tenure: Crown	Protection status:	A, B, C
GPS: 2604579E – 6180277N	Area:	6.7 ha

Location

The Sutherland/Normanby Road Ends site is located 3.5 km south of Manaia and 15 km west of Hawera. The site is within the Egmont Ecological District.

General description

At the end of Sutherland and Normanby roads is a small coastal site (6.7 ha) comprising of steep mudstone cliffs, overlying sand and tephra. Native shrubs exist on ledges, and native herbfields exist on the cliffs. The foreshore and marginal strip is administered by the Department of Conservation.

Ecological features

Vegetation

The Sutherland/Normanby Road Ends site contains a number of threatened plant species and has been noted by the Department of Conservation as one of the most important botanical sites in the region.

Of particular note is the presence of the 'At Risk (Range Restricted)' woollyhead *Craspedia* 'Otakeho' – this plant is found only in two sites in the North Island, both in Taranaki. The only other sites in New Zealand occur around Nelson. It is also one of two North Island sites to have the 'Chronically Threatened (Gradual decline)' dwarf buttercup (*Ranunculus recens* var. *recens*) and is the only North Island site for the shore koromiko (*Hebe elliptica* var. *elliptica*).

Also present is shore/sea spurge *Euphorbia glauca*, which is identified as 'Chronically Threatened (Serious Decline)' nationally.

Fauna

Unknown. No specific indigenous fauna species have been recorded for Sutherland/Normanby Road Ends.

Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Regionally distinctive through the presence of the 'At Risk' woollyhead <i>Craspedia</i> 'Otakeho' (1 of only 2 sites in the North Island), the 'Chronically Threatened' <i>Ranunculus recens</i> var. <i>recens</i> (also 1 of only 2 sites in the North Island) and the shore koromiko (the only North Island site where the plant is found)
Representativeness	High	Contains indigenous vegetation on F5.2c – an 'Acutely Threatened' LENZ environment
Ecological context	High	Provides core habitat for the regionally distinctive and threatened woollyhead <i>Craspedia</i> 'Otakeho', <i>Ranunculus recens</i> var. <i>recens</i> and the shore koromiko
Sustainability	Positive	In good vegetative condition. Key ecological processes still influence the site. Under appropriate management, it can remain resilient to existing or potential threats

Other Values

The Sutherland/Normanby Road Ends site has cultural value. Pa sites are located nearby.

Management threats and response

Potential and actual threats to the sustainability of Sutherland/Normanby Road Ends site's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Low to medium	Possums, cats, mustelids, and rats
Weeds	High	Chilean Rhubarb
Habitat modification	Medium	Coastal erosion processes Grazing

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

Site protection	Yes/No	Description
A	Yes	Public ownership or formal agreement Department of Conservation (Marginal strip and foreshore)
B	Yes	Regulatory protection by local government General regional or district rules might also apply
C	Yes	Active protection Self-help Possum Control Programme on adjacent privately owned land



Swampy Bush

At a glance (last updated: February 2006)			
TRC reference:	0935-0	Ecological district:	Egmont
Other reference:	STDC SNA 2	LENZ environment:	C1.3a
Land tenure:	Private	Protection status:	B, C
GPS:	1. 2582431E – 6202260N	Area:	1. 3.4 ha
	2. 2582627E – 6201817N		2. 19.3 ha
Total:		22.7 ha	

Location

Swampy Bush comprises of two wetland remnants located on privately owned land. The remnants are located 7 km south-east of Rhotu and lie in the Egmont Ecological District.

General description

The Swampy Bush remnants have a combined area of 22.7 ha. forest remnant, located on lahar deposits close to the coast. The lahar deposits are not well drained and the species in the forest type reflect the wet nature of the land.

Swampy Bush is significant as a remnant of rare semi-coastal forest on the Egmont ring plain. The bush has a history of modification. Some tracks have been cleared and parts of the wetland are grazed by livestock. The canopy is discontinuous in parts. Very little native vegetation remains in the greater surrounding area.



Ecological features

Vegetation

The site contains semi-coastal tawa (*Beilschmiedia tawa*) and pukatea (*Laurelia novaezelandiae*) forest. Other canopy species include kohekohe (*Dysoxylum spectabile*), nikau (*Rhopalostylis sapida*), pigeonwood (*Hedycarya arborea*), and mahoe (*Meliclytus ramiflorus*).

Fauna

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

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 C1.3a – an 'Acutely Threatened' LENZ environment
Ecological context	Low to medium	Relatively isolated remnant
Sustainability	Positive	In average vegetative condition. Habit modification continues to be a significant threat. However, 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 Swampy Bush forest and wetland's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Low	Possums cats, mustelids, and rats
Weeds	Low to medium	Wandering willy
Habitat modification	Medium	The area is not fenced and grazing is a threat. Clearance and drainage are also a threat

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

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



Tank Farm Ponds (Lloyd's Ponds)

At a glance (last updated: February 2006)			
TRC reference:	0911-0	Ecological district:	Egmont
Other reference:	NPDC SNA 30 NPDC ID24400 QEII 5/06/122	LENZ environment:	F5.2b
Land tenure:	Private	Protection status:	A, B, C
GPS:	2598200E – 6245900N	Area:	9.4 ha

Location

The Omata Tank Farm Ponds (Lloyd's Ponds) are located on privately owned land, close to New Plymouth City, approximately 1 km south-west of Paritutu. The ponds lie in the Egmont Ecological District.

General description

The Tank Farm Ponds are a 9.4 ha QEII covenanted site which consists of two semi-coastal dune lakes, located 40 metres above sea level. The site is flat in contour. There are very few similar areas of this nature in Taranaki. The wetland swamp provides a link to the coast for Egmont, New Plymouth, and the nearby Duke Wetlands and Barrett Lake Scenic Reserve.

Ecological features

Vegetation

The Tank Farm Ponds (Lloyd's Ponds) is a discrete semi-coastal lacustrine and palustrine raupo-flax reedland on wetland swamp. Dominant vegetation types within the wetland are raupo reedland (*Typha orientalis*), flax (*Phormium tenax*), and sedges (*Carex* spp. and *Eleocharis sphacelata*).

The margins have been planted with a variety of native plants such as *Coprosma* species and cabbage trees (*Cordyline australis*) including some not natural to the area.

Fauna

The Tank Ponds site provides an excellent wetland and pond habitat for a number of waterfowl, including Australasian bittern (*Botaurus poiciloptilus*), which is identified as 'Acutely Threatened (Nationally Endangered)'.

Other native birdlife recorded at the ponds include little egrets (*Egretta garzetta*), little black shags (*Phalacrocorax sulcirostris*), spur-winged plovers (*Vanellus miles novaehollandiae*), New Zealand shovelers (*Anas rhynchos*), and pukeko (*Porphyrio porphyrio*).

Mallard ducks (*Anas platyrhynchos*), paradise shelduck (*Tadorna variegata*) and Canadian geese (*Branta canadensis*) are also present at the Tank Farm Ponds.

Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Contains the 'Acutely Threatened' Australasian bittern
Representativeness	High	Contains indigenous vegetation on F5.2b – an 'Acutely Threatened' LENZ environment
Ecological context	High	Coastal lake habitat an important link to the coast for the nearby Barrett Lake Scenic Reserve. Provides core habitat for Australasian bittern
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 Tank Farm Ponds' (Lloyd's Ponds') 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	Formally protected and fenced

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

Site protection	Yes/No	Description
A	Public ownership or formal agreement	Yes QEII Covenant
B	Regulatory protection by local government	Yes Site specific rules apply – Taranaki Regional Council rules for wetlands (refer Appendix IIB of the Regional Fresh Water Plan) – 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 Fenced Enhancement plantings Regular weed and pest control



Tapuae Wetland

At a glance (last updated: February 2006)

TRC reference:	0949-0	Ecological district:	Egmont
Other reference:		LENZ environment:	F5.2b
Land tenure:	Private	Protection status:	B, C
GPS:	2596723E – 6232179N	Area:	2.4 ha

Location

The Tapuae Wetland is located on privately owned land, approximately 4 km east of Oakura. The wetland is within the Egmont Ecological District.

General description

The Tapuae Wetland covers 2.4 ha. The site is a remnant of previously extensive pukatea forest, and raupo reedland – now rare in coastal Taranaki.

Ecological features

Vegetation

The Tapuae Wetland is dominated by pukatea (*Laurelia novae zelandiae*) in drier parts of the site, and raupo reedland (*Typha orientalis*) in the wetter parts. The condition of the vegetation is excellent.

Fauna

Fauna present in the wetland includes New Zealand pigeon (*Hemiphaga novaseelandiae*), which is identified as 'Chronically Threatened (Gradual Decline)'.
Fantail (*Rhipidura fulginosa*), tui (*Prosthemadera novaeseelandiae*) and pukeko (*Porphyrio porphyrio*) are also present.

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	Close to and interconnected with several small forest remnants in the vicinity
Sustainability	Positive	Small area but in excellent vegetative condition. Sheltered site. 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 Tapuae Wetland's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Low to medium	Possums, rats, cats, and mustelids
Weeds	Low	A small amount of blackberry
Habitat modification	Low	Wetland is fenced and in the process of being covenanted

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

Site protection	Yes/No	Description	
A	Public ownership or formal agreement	No	QEII Covenant (in progress)
B	Regulatory protection by local government	Yes	General regional or district rules might also apply
C	Active protection	Yes	Fenced Enhancement planting Self-help Possum Control Programme



Taramoukou

At a glance (last updated: February 2006)			
TRC reference:		Ecological district:	North Taranaki
Other reference:	NPDC SNA 13	LENZ environment:	D2.1b (5.8 ha) F1.1b (52.1 ha) F5.2a (8.0 ha)
Land tenure:	Private	Protection status:	B
GPS:	2627929E – 6234883N	Area:	65.9 ha

Location

The Taramoukou site is located on privately owned land, 13.4 km east of Lepperton. It lies in the North Taranaki Ecological District.

General description

The 65.9 ha Taramoukou site adjoins the Taramoukou Conservation Area forest. Sited on historically cleared and grazed swampy alluvial flats of the Onaero River, Taramoukou consists mainly of secondary pukatea forest on dissected hill country. The site has retained a high degree of naturalness.

Ecological features

Vegetation

The Taramoukou site consists mainly of secondary alluvial forest. Pukatea (*Laurelia novae zelandiae*) is the most common canopy species with emergent kahikatea (*Dacrycarpus dacrydioides*). The area also includes tawa (*Beilschmiedia tawa*) and rimu (*Dacrydium cupressinum*) forest. *Carex virgata* – *Juncus* spp. rush – tussockland occurs on the alluvial terrace.

Alluvial forest in the North Taranaki ecological district has mostly been cleared or degraded and is now present in only a few areas. This site is a valuable extension to the adjoining Taramoukou Conservation Area.

Fauna

The headwaters of the Onaero River contain a high number of native fish, including the banded kokopu (*Galaxias fasciatus*).

Notable bird life at Taramoukou includes the 'At Risk (Sparse)' fernbird (*Bowdleria punctata vealeae*), which is particularly uncommon in Taranaki.

Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Contains the 'At Risk' fernbird, which is particularly uncommon in Taranaki
Representativeness	High	Contains indigenous vegetation on 'Acutely Threatened' (F5.2a), 'Chronically Threatened' (D2.1b) and 'At Risk' (F7.2a) LENZ environments
Ecological context	High	Adjoins and is interconnected with the extensive Taramoukou Conservation Area and includes different ecosystem types
Sustainability	Positive	Large area in relatively good vegetative condition. Key ecological processes still influence the site. Under appropriate management, it can remain resilient to existing or potential threats

Management threats and response

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

Threats to ecological values	Level of risk	Comment
Pest animals	Medium to high	Possums, cats, goats, pigs, mustelids, hedgehogs, and rats
Weeds	Low	
Habitat modification	Medium	The wetland is only partially fenced, however most of the wetland is surrounded by natural vegetative barriers

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

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



Taramoukou Conservation Area

At a glance (last updated: February 2006)			
TRC reference:	0881-0	Ecological district:	North Taranaki
Other reference:	NPDC SNA 26 DOC 70020	LENZ environment:	F1.1b (1,506.7 ha) F1.1d (1.9 ha) F5.2a (14.8 ha) F7.2a (147.1 ha)
Land tenure:	Crown	Protection status:	A, B, C
GPS:	2628451E – 6232254N	Area:	1,670.5 ha

Location

The Taramoukou Conservation Area is located approximately 13.7 km south-east of Lepperton. It lies in the North Taranaki Ecological District.

General description

The Taramoukou Conservation Area is a large (1,670.5 ha) area of mainly primary forest adjoining the upper reaches of the Onaero River which includes a variety of landforms and associated vegetation types.

There is a riverine wetland on historically cleared and grazed swampy alluvial flats with surrounding ridges broken with narrow tops, steep faces and numerous slips.

The Conservation Area contains landforms uncommon in North Taranaki. In particular, a broad flat radially drained interfluvium has been retained by an overlying resistant bed of conglomerate. In contrast fluvial erosion of the surrounding siltstones has resulted in the typical highly dissected landscape.



Ecological features

Vegetation

An outlying semicoastal area of pukatea (*Laurelia novaezelandiae*) and kohekohe (*Dysoxylum spectabile*) dominant forest (nationally rare) with frequent emergent rimu (*Dacrydium cupressinum*) and abundant nikau (*Rhopalostylis sapida*), and kawakawa (*Macropiper excelsum*) in the understorey on a broad flat radially drained interfluvium.

There is a small enclave of primary kahikatea (*Dacrycarpus dacrydioides*) forest, now very rare in North Taranaki. There are also small areas of secondary pukatea forest with emergent kahikatea on the alluvial flats. The wetland on the flats contains sedgeland (*Carex virgata*).

Puriri (*Vitex lucens*) present here is rare at this latitude and distance from the coast.

Fauna

The headwaters of the Onaero River contain a high number of native fish, including the banded kokopu (*Galaxias fasciatus*).

Notable bird life at the Taramoukou Wetland includes the 'At Risk (Sparse)' fernbird (*Bowdleria punctata vealeae*), which is particularly uncommon in Taranaki.

Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Contains the 'At Risk' fernbird (Sparse), which is particularly uncommon in Taranaki
Representativeness	High	Contains indigenous vegetation on 'Acutely Threatened' (F5.2a) and 'At Risk' (F7.2a) LENZ environments
Ecological context	High	Very large area, core habitat for range of species. Provides excellent habitat for indigenous fish species, particularly the banded kokopu
Sustainability	Positive	Large area in relatively good vegetative condition. Key ecological processes still influence the site. Under appropriate management, it can remain resilient to existing or potential threats

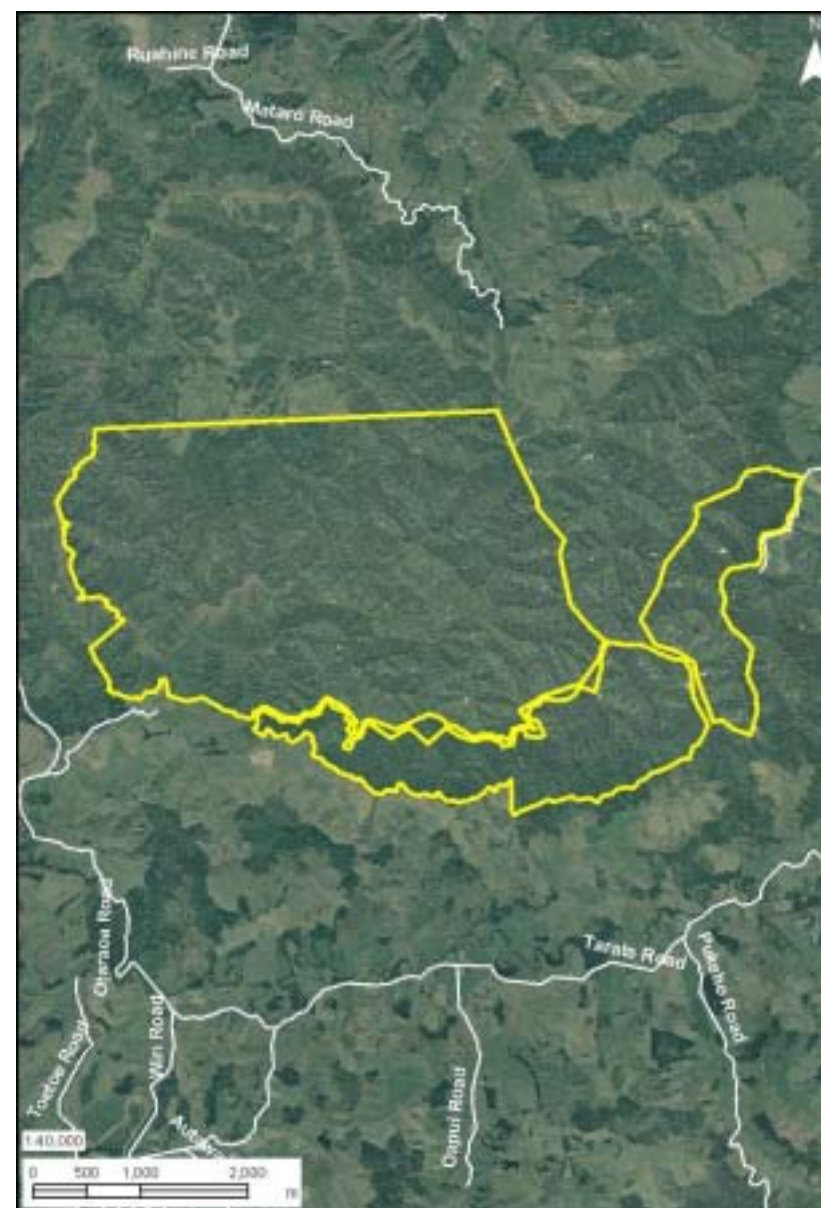
Management threats and response

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

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

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

Site protection	Yes/No	Description
A Public ownership or formal agreement	Yes	Public conservation estate (Conservation Area)
B Regulatory protection by local government	Yes	Site specific rules apply <ul style="list-style-type: none"> – Taranaki Regional Council rules for wetlands (refer Appendix IIA of the Regional Fresh Water Plan) – New Plymouth District Council rules for Significant Natural Areas (refer Appendix 21 of the District Plan) General regional or district rules might also apply
C Active protection	Yes	Partially fenced



Tarata Conservation Area

At a glance (last updated: February 2006)			
TRC reference:		Ecological district:	North Taranaki
Other reference:	DOC 70350	LENZ environment:	F1.1b (78.4ha) F5.2a (11.0 ha) F7.2a (42.7 ha)
Land tenure:	Crown	Protection status:	A, B
GPS:	2627106E – 6226044N	Area:	132.1 ha

Location

The Crown owned Tarata Conservation Area is located 12.4 km east of Inglewood, on the western side of the Tarata saddle on Junction Road. The Conservation Area lies near the southern boundary of the North Taranaki Ecological District.

General description

The Tarata Conservation Area, which is administered by the Department of Conservation, is a relatively large area (132.1 ha) of primary and secondary forest.

The forested area lies on a variety of landforms including secondary pukatea-dominant forest on broad colluvial slopes. It is one of the few primary forests remaining in the southern part of the North Taranaki Ecological District. The rimu/tawa forest is representative of the lowland forests which once covered the lower parts of the Waitara Catchment.

Ecological features

Vegetation

The Tarata Conservation Area primarily consists of rimu (*Dacrydium cupressinum*)/tawa (*Beilschmiedia tawa*) forest.

Secondary – pukatea (*Laurelia novae zelandiae*) – kohekohe (*Dysoxylum spectabile*) forest is also present. It is unusual to have kohekohe present at such a distance from the coast (24 km). The sub-canopy consists mainly of tree ferns.

Fauna

New Zealand pigeon (*Hemiphaga novaseelandiae*), which is identified as 'Chronically Threatened (Gradual Decline)', is present.

Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	Medium	Contains the 'Chronically Threatened' New Zealand wood pigeon
Representativeness	High	Contains indigenous vegetation on 'Acutely Threatened (F5.2a) and 'At Risk' (F7.2a) LENZ environments
Ecological context	Medium	Small forest remnants nearby. Also close to and interconnected to another Key Native Ecosystem (Tuihu Conservation Area), which lies 4.9 km to the east
Sustainability	Positive	In good condition. Key ecological processes still influence the site. Under appropriate management, it can remain resilient to existing or potential threats

Other values

Scenic value on main road.

Management threats and response

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

Threats to ecological values	Level of risk	Comment
Pest animals	Medium	Possums, goats, cats, mustelids, and rats
Weeds	Low	
Habitat modification	Low	Some past logging in parts. Also livestock damage around the margins

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

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



Tarere Conservation Area

At a glance (last updated: February 2006)			
TRC reference:		Ecological district:	Manawatu Plains
Other reference:	DOC 70320	LENZ environment:	D2.3a (1.6 ha) F1.1b (0.9 ha) F1.1c (146.5 ha) F1.1d (0.5 ha) F1.3b (6,201.2 ha) F5.2a (2.9 ha) F5.2c (21.1 ha) F7.2a (522.4 ha) F7.2b (0.2 ha) H1.2c (2.0 ha)
Land tenure:	Crown	Protection status:	A, B
GPS:	2640228E – 6181583N	Area:	7,006.6 ha

Location

The Crown owned Tarere Conservation Area is located 7 km north-east of Manutahi. It lies in the Manawatu Plains Ecological District.

General description

The Tarere Conservation Area, combined with the Tarere Forest Extensions, is the largest indigenous forested area in the Manawatu Plains Ecological District. The Conservation Area, which is administered by the Department of Conservation, is 7,006.6 ha in size.

The Tarere Conservation Area, combined with the Tarere Forest Extensions, is unique in terms of its size and in that most of the vegetation is still virgin forest. A large number of flora species also have a restricted distribution in the Manawatu Plains Ecological District.

Ecological features

Vegetation

Tawa (*Beilschmiedia tawa*) is the most common canopy species, though pukatea (*Laurelia novae zelandiae*), hinau (*Elaeocarpus dentatus*), totara (*Podocarpus totara*), matai (*Prumnopitys taxifolia*), puka (*Griselinia lucida*),

white maire (*Nestegis lanceolata*), and mamaku (*Cyathea medullaris*) are also present in the canopy.

The subcanopy is dominated by mahoe (*Meliclytus* species), but karaka (*Corynocarpus laevigatus*), pigeonwood (*Hedycarya arborea*), lancewood (*Pseudopanax crassifolius*), mapou (*Myrsine australis*), titoki (*Alectryon excelsus*), lacebark (*Hoheria sextylosa*), marbleleaf (*Carpodetus serratus*), kaikomako (*Pennantia corymbosa*), and ponga (*Cyathea dealbata*) are also present. Much of the forest has a thick understorey with several saplings of canopy species, as well as heketara (*Olearia rani*), nikau (*Rhopalostylis sapida*), karamu (*Coprosma robusta*), pate (*Schefflera digitata*), broom (*Carmichaelia arborea*), hangehange (*Geniostoma rupestre* var. *ligustrifolium*), and New Zealand gloxinia (*Rhabdothamnus solandri*).

The trees support many epiphytes including an unidentified species of mistletoe, both *Earina* orchids and at least two perching lilies (*Collospermum hastatum* and *Astelia solandri*). Climbers include kiekie (*Freycinetia baueriana* subsp. *banksii*), supplejack (*Ripogonum scandens*), four species of climbing rata, bush lawyer (*Rubus cissoides*), New Zealand Jasmine (*Parsonsia* sp.), white clematis (*Clematis paniculata*) and *Clematis foetida*.

The ground cover is similarly diverse. In addition to tree seedlings, there are several concentrations of parataniwha (*Elatostema rugosum*), bush rice grass and a hooked sedge (*Uncinia* sp.). Ferns present include mainly thread fern (*Blechnum filiforme*), but shield fern, shining spleenwort (*Asplenium oblongifolium*), and hen and chicken fern (*Asplenium bulbiferum*) are also common. Kiokio (*Blechnum* sp.) is common on a few small, steep, exposed faces lower down the gully sides.

On one spur there is a small remnant of black beech (*Nothofagus solandri*) forest and a few trees of narrow-leaved maire (*Nestegis montana*).

Fauna

Notable fauna species present include the Acutely Threatened (Nationally Vulnerable) North Island long-tailed bat (*Chalinolobus tuberculata*) and the North Island brown kiwi (*Apteryx australis mantelli*), which is identified as 'Chronically Threatened (Serious Decline)'.

The forest also provides habitat for tomtits (*Petroica macrocephala*) and the North Island robin (*Petroica australis longipies*). Parakeets (species unconfirmed) are also recorded as present in the forest by the Department of Conservation. Red crowned parakeets are not threatened but yellow crowned parakeets are in 'Gradual Decline'.

Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	Low to medium	Suspected but unconfirmed presence of 'Chronically Threatened' North Island brown kiwi and native bats
Representativeness	High	Contains indigenous vegetation on 'Acutely Threatened' (F5.2a), 'Chronically Threatened' (H1.2c), and 'At Risk' (D2.3a, F1.1c, F7.2a) LENZ environments
Ecological context	High	Large area of core habitat for range of species. Also distinctive in terms of the presence of primary forest which has a restricted distribution in the Ecological District.
Sustainability	Positive	A significantly large area in good vegetative condition. Key ecological processes still influence the site. Under appropriate management, it can remain resilient to existing or potential threats

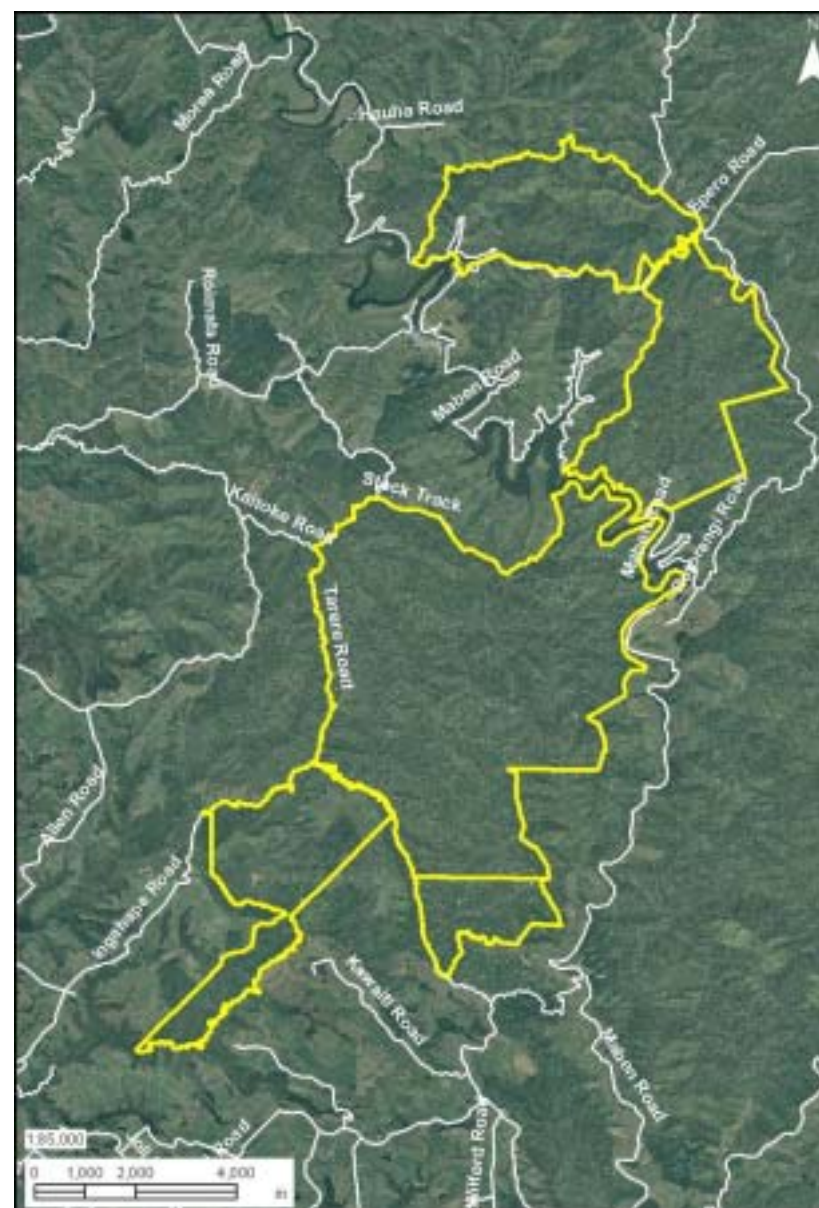
Management threats and response

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

Threats to ecological values	Level of risk	Comment
Pest animals	Medium to high	Possums, goats, feral pigs, cats, mustelids, and rats
Weeds	Medium to high	Old Man's Beard occurs in hedges on nearby farmland and needs to be checked for in the forest
Habitat modification	Low	Margins are subject to threat from grazing

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

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



Tarere Forest Extensions

At a glance (last updated: February 2006)			
TRC reference:		Ecological district:	Manawatu Plains
Other reference:	STDC SNA 20 SSBI Q21/H025	LENZ environment:	F1.3b (149.2 ha) F5.2a (17.7 ha) F5.2c (157.7 ha) F7.2a (17.1 ha)
Land tenure:	Private (339.3 ha)	Protection status:	A, B
GPS:	2635500E – 6175000N	Area:	341.9 ha

Location

Tarere Forest Extensions are on private land (341.9 ha) located 7 km north-east of Manutahi. The forest lies in the Manawatu Plains Ecological District.

General description

The Tarere Forest Extensions complements the Tarere Conservation Area and together they form the largest indigenous forested area in the Manawatu Plains Ecological District. Most of the forest extension is on private land in a gully system centred on the Ingahape Stream. The forest has been more modified in the past than that of Tarere Forest and there is consequently some successional vegetation.

Tarere Forest Extensions, combined with the Tarere Conservation Area, is unique in terms of its size and in that most of the vegetation is still virgin forest. A large number of flora species also have a restricted distribution in the Manawatu Plains Ecological District.

Ecological features

Vegetation

Tawa (*Beilschmiedia tawa*) is the most common canopy species, though pukatea (*Laurelia novae zelandiae*), hinau (*Elaeocarpus dentatus*), totara (*Podocarpus totara*), matai (*Prumnopitys taxifolia*), puka (*Griselinia lucida*), white maire (*Nestegis lanceolata*) and mamaku (*Cyathea medullaris*) are also present in the canopy.

The subcanopy is dominated by mahoe (*Meliclytus ramiflorus*), but karaka (*Corynocarpus laevigatus*), pigeonwood (*Hedycarya arborea*), lancewood

(*Pseudopanax crassifolius*), mapou (*Myrsine australis*), titoki (*Alectryon excelsus*), lacebark (*Hoheria sextylosa*), marbleleaf (*Carpodetus serratus*), kaikomako (*Pennantia corymbosa*) and ponga (*Cyathea dealbata*) are also present.

The previously cleared southern and eastern parts of the forest have now reverted to mamaku (*Cyathea medullaris*) over a mix of shrubs, the most common of which are mahoe and manuka (*Leptospermum scoparium*).

Fauna

Notable fauna species present in the Tarere Forest And assumed to also be in this area include the Acutely Threatened (Nationally Vulnerable) North Island long-tailed bat (*Chalinolobus tuberculata*) and the North Island brown kiwi (*Apteryx australis mantelli*), which is identified as 'Chronically Threatened (Serious Decline)'.

The forest also provides habitat for tomtits (*Petroica macrocephala*) and the North Island robin (*Petroica australis longipies*). Parakeets (species unconfirmed) are also recorded as present in the forest by the Department of Conservation.

Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	Low to medium	Suspected but unconfirmed presence of 'Chronically Threatened' North Island brown kiwi and native bats
Representativeness	High	Contains indigenous vegetation on 'Acutey Threatened' (F5.2a, F5.2c) and 'At Risk' (F7.2a) LENZ environments
Ecological context	High	Distinctive in terms of the presence of primary forest which has a restricted distribution in the Ecological District
Sustainability	Positive	A significantly large area in good vegetative condition. Key ecological processes still influence the site. Under appropriate management, it can remain resilient to existing or potential threats

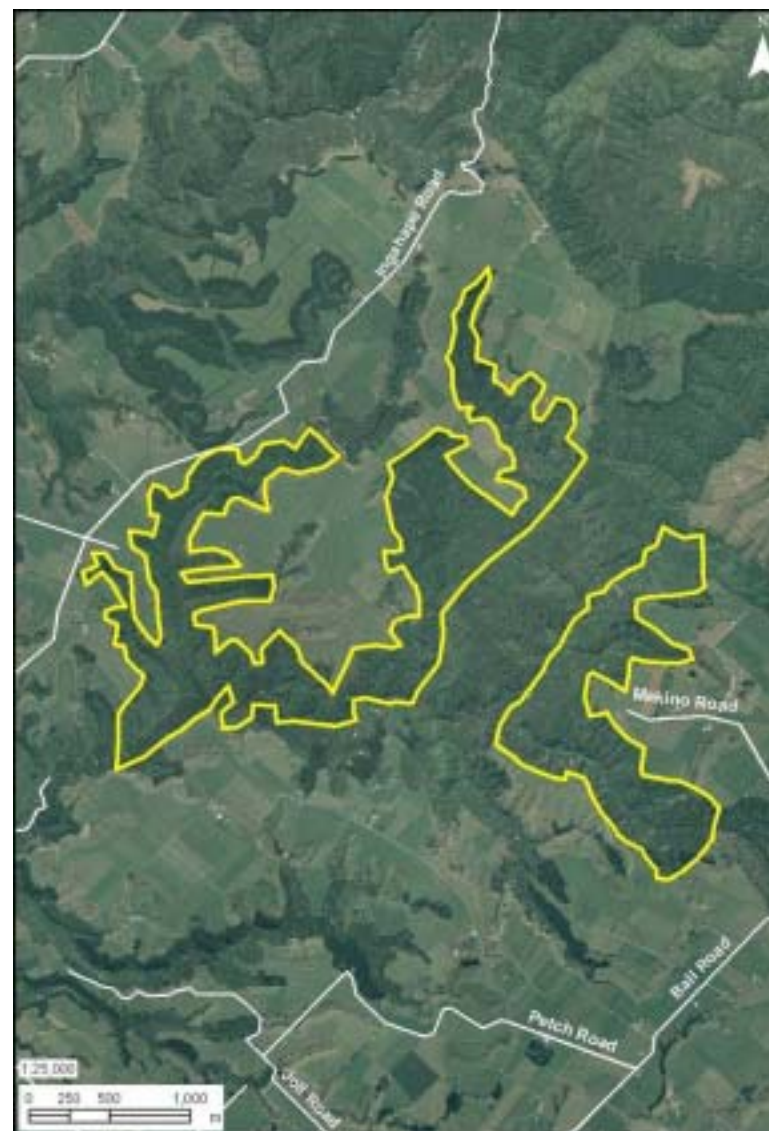
Management threats and response

Potential and actual threats to the sustainability of the Tarere Forest Extensions' ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Medium to high	Possums, goats, feral pigs, cats, mustelids, and rats
Weeds	Medium to high	Old Man's Beard occurs in hedges on nearby farmland and needs to be checked for in the forest
Habitat modification	Low	Margins are subject to threat from clearance and grazing

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

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



Tariki Bush

At a glance (last updated: February 2006)			
TRC reference:		Ecological district:	Egmont
Other reference:	NPDC – SNA 28	LENZ environment:	F5.2a
Land tenure:	Private	Protection status:	B, C
GPS:	2618246E – 6220246N	Area:	8.2 ha

Location

Tariki Bush is located on privately owned land, 7.8 km south of Inglewood. The site lies in the Egmont Ecological District.

General description

Tariki Bush is a small (8.2 ha) remnant of primary tawa forest on debris flows. It is a typical remnant of forest that was once much more widespread, but now rare in the region.

Ecological features

Vegetation

The canopy of Tariki Bush consists mostly of tawa (*Beilschmiedia tawa*). The canopy is tall and in excellent condition.

Fauna

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

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 F5.2a – an 'Acutely Threatened' LENZ environment
Ecological context	Medium	Other small remnants in vicinity provide linkages, especially to Egmont National Park
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 Tariki Bush's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Low to medium	Possums, cats, rabbits, goats, mustelids, and rats
Weeds	Low	Blackberry, Old Man's Beard
Habitat modification	Low	Fenced

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

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



Tarurutangi Swamp

At a glance (last updated: February 2006)			
TRC reference:	0913-0 0006-0	Ecological district:	Egmont
Other reference:	NPDC SNA 26 QEII 5/06/130	LENZ environment:	F5.2b
Land tenure:	Private	Protection status:	A, B, C
GPS:	2610563E – 6235397N	Area:	5.6 ha

Location

Tarurutangi Swamp is located on privately owned land, 5 km south east of New Plymouth. The swamp lies in the Egmont Ecological District.

General description

The Tarurutangi Swamp is 5.6 ha in size and situated 125 metres above sea level. The swamp lies on a poorly drained hollow on uplifted marine terrace. It is a previously logged forest remnant, the ground conditions are very wet and low-lying.

The vegetation is in an advanced stage of regeneration and is in good condition. It is a typical remnant of a swamp forest that was once much more widespread, but now rare in the region.



Ecological features

Vegetation

The Tarurutangi Swamp is predominantly semi-coastal pukatea forest with a small area of rushland.

Vegetation types include pukatea (*Laurelia novae-zelandiae*) forest with canopy associates of kahikatea (*Dacrycarpus dacrydioides*) and swamp maire (*Syzygium maire*). *Juncus gregiflorus* rushland is predominant on the north-west corner. The rushland also includes a number of *Carex* species, *Eleocharis acuta* and sphagnum moss. There is good regeneration of swamp coprosma (*Coprosma tenuicaulis*).

Fauna

Birdlife present in the Tarurutangi Swamp includes New Zealand pigeon (*Hemiphaga novaeseelandiae*), which is identified as 'Chronically Threatened' ('Gradual Decline'). Tui (*Prosthemadera novaeseelandiae*), bellbird (*Anthornis melanura melanura*), North Island fantail (*Rhipidura fuliginosa placabilis*), grey warbler (*Gerygone igata*), silvereye (*Zosterops lateralis lateralis*) and pukeko (*Porphyrio porphyrio*), are also present.

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	Close to and interconnected with other forest remnants in the vicinity
Sustainability	Positive	In average 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 Tarurutangi Swamp's ecological values are as follows:

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

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

Site protection	Yes/No	Description
A Public ownership or formal agreement	Yes	QEII Covenant covers the entire site
B Regulatory protection by local government	Yes	Site specific rules apply <ul style="list-style-type: none"> – Taranaki Regional Council rules for wetlands (refer Appendix IIB of the Regional Fresh Water Plan) – 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	Fenced Enhancement plantings Self-help Possum Control Programme



Taungatara Bush

At a glance (last updated: February 2006)			
TRC reference:		Ecological district:	Egmont
Other reference:	STDC SNA 3 SSBI P20/H007	LENZ environment:	C1.3a
Land tenure:	Crown	Protection status:	A, B, C
GPS:	2589500E – 6193500N	Area:	13.3 ha

Location

The Crown owned Taungatara Bush is located 6 km east of Opunake. The Bush lies in the Egmont Ecological District.

General description

Taungatara Bush is Crown land administered by the Department of Conservation. It lies on lahar mounds and inter-mound areas and supports 13.3 ha semi-coastal forest that is now rare on the Egmont Ring Plain. The site boundaries are unfenced and consequently the undergrowth has been damaged by past cattle grazing. The site is 3.9 km north of another Key Native Ecosystem – Julian’s Pond.

Ecological features

Vegetation

Vegetation within the forest consists mainly of tawa (*Beilschmiedia tawa*) and pukatea (*Laurelia novaezelandiae*). Other canopy species include kahikatea (*Dacrycarpus dacrydioides*) and mahoe (*Melicytus ramiflorus*).

Fauna

Unknown. No specific indigenous fauna species have been recorded for Taungatara Bush. However, it is considered excellent habitat for brown mudfish (*Neochanna apoda*). Although to date none have been found at the site, it is a potential release area.

Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	Low	Not known to contain any ‘Acutely Threatened’ species, or species uncommon in Taranaki
Representativeness	High	Contains indigenous vegetation on C1.3a – an ‘Acutely Threatened’ LENZ environment
Ecological context	Low	Few remnants in the vicinity
Sustainability	Positive	In fair vegetative condition. However 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 Taungatara Bush’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	Medi	Recently fenced, grazed in past.

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

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



Te Puia

At a glance (last updated: February 2006)			
TRC reference:		Ecological district:	North Taranaki
Other reference:	NPDC – SNA 2	LENZ environment:	F5.2b
Land tenure:	Private	Protection status:	B
GPS:	2610563E – 6235397N	Area:	1.6 ha

Location

Te Puia is located on privately owned land, 7.8 km south of Mokau. The site lies within the North Taranaki Ecological District.

General description

Te Puia is a relatively small area (1.6 ha) of vigorously regenerating coastal scrub and forest. The site is situated 30 metres above sea level and is one of the few remaining natural areas on the northern uplifted marine terrace. It is adjacent to Kawau Pa and the Kuwhatahi Stream mouth.

Ecological features

Vegetation

Te Puia supports karaka (*Corynocarpus laevigatus*), mapou (*Myrsine australis*), hangehange (*Geniostoma rupestre* var. *ligustrifolium*) and flax (*Phormium tenax*). The canopy is short and wind blown.

Fauna

Unknown. No specific indigenous fauna species have been recorded for Te Puia.

Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	Low	Not known to contain any 'Acutely Threatened' species or species uncommon in Taranaki
Representativeness	High	Contains indigenous vegetation on F5.2b – an 'Acutely Threatened' LENZ environment
Ecological context	Medium	Adjoins the Kawau Pa Historic Reserve and also close to Kuwhatahi
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 Te Puia'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	Low	
Habitat modification	Low	

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

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



Te Wairoa

At a glance (last updated: February 2006)		
TRC reference:		Ecological district: Egmont
Other reference:	NPDC ID6391 QEII 5/06/044	LENZ environment: F5.2b
Land tenure:	Private	Protection status: A, B, C
GPS:	2613900E – 6235100N	Area: 4.9 ha

Location

Te Wairoa is located on privately owned land, 7 km north of Inglewood. The site lies in the Egmont Ecological District.

General description

Te Wairoa site covers a 4.9 ha area of coastal broadleaved forest remnant. It is a small remnant of semi-coastal forest on a gentle hill. The remnant has been grazed in the past, but is now fenced and regenerating well.

Ecological features

Vegetation

The remnant contains two forest types: kohekohe (*Dysoxylum spectabile*) forest on the dry hill top and tawa (*Beilschmiedia tawa*) forest on the lower slopes and around the small stream. Other canopy trees include pukatea (*Laurelia novaezelandiae*), particularly around the stream, titoki (*Alectryon excelsus*), and rewarewa (*Knightia excelsa*). There is also a small stand of swamp maire (*Syzygium maire*) at the southern end of the bush in the swampy areas.

Along the frontage to Mountain Road there has been extensive planting of kahikatea.

A number of other plant species are also present in the canopy and subcanopy. These include kahikatea (*Dacrycarpus dacrydiodes*), miro (*Prumnopitys ferruginea*), puriri (*Vitex lucens*), karaka (*Corynocarpus laevigatus*), mamaku (*Cyathea medullaris*), kawakawa (*Macropiper excelsum*), pigeonwood (*Hedycarya arborea*), *Coprosma*, silver fern (*Cyathea dealbata*), kowhai (*Sophora microphylla*), mahoe (*Meliclytus*

ramiflorus), nikau (*Rhopalostylis sapida*), and supplejack (*Ripogonum scandens*).

Ground cover consists of ferns and seedlings of canopy species.

Fauna

Unknown. No specific indigenous species have been recorded for Te Wairoa.

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 F5.2b – an 'Acutely Threatened' LENZ environment
Ecological context	Medium	Along with a few other small remnants in the vicinity, Te Wairoa provides a corridor to Egmont National Park
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 Te Wairoa'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, Jerusalem cherry, pampas present along road frontage
Habitat modification	Low	Formally protected and fenced. Hydrangeas once planted around forest edge still persist in places but are being overgrown

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

Site protection	Yes/No	Description
A	Yes	Public ownership or formal agreement QEII Covenant
B	Yes	Site specific rules apply – New Plymouth District Council rules for Significant Natural Areas (refer Appendix 21 of the District Plan) General regional or district rules might also apply
C	Yes	Fenced, Possum control, Wandering willy control, Supplementary planting



Te Wawa Wetland

At a glance (last updated: February 2006)			
TRC reference:	0992-0	Ecological district:	Egmont
Other reference:		LENZ environment:	F5.2b
Land tenure:	Private	Protection status:	B, C
GPS:	2593879E – 6232510N	Area:	4.8 ha

Location

The Te Wawa Wetland is located on privately owned land, 1 km north-east of Oakura. The wetland lies in the Egmont Ecological District.

General description

The Te Wawa Wetland is in a small poorly drained hollow, covering 4.8 ha. The two main vegetation species present are flax and raupo. There has been historical clearance of flax and drainage. The Department of Conservation has identified the palustrine wetland as being one of the largest intact and most diverse wetlands on the ring plain. The wetland is also of particular cultural significance to Maori.

Ecological features

Vegetation

Vegetation within the wetland includes raupo reedland (*Typha orientalis*), sedges (*Carex* spp.) and flax (*Phormium tenax*).

Coastal forest is also present on a small hill at the inland end of the wetland and on some of the margins. Species include kawakawa (*Macropiper excelsum*), mahoe (*Melicactus ramiflorus*), mamaku (*Cyathea medullaris*), karamu (*Coprosma robusta*), and lancewood (*Pseudopanax crassifolium*).

Introduced plants and weeds such as brush wattle (*Paraserianthes lophantha*), pampas (*Cortaderia selloana*), blackberry, crack willow, gorse, boxthorn, and Japanese honeysuckle are also present.

Fauna

The wetland provides habitat for a wide variety of native wildlife. The wetland provides a feeding area for a significant number of native birds including Australasian bittern (*Botaurus poiciloptilus*), which is identified as 'Acutely Threatened (Nationally Endangered)' and spotless crane (*Porzana tabuensis plumbea*), which is identified as being 'At Risk (Sparse)' and is particularly uncommon in Taranaki.

Other bird species present include white faced heron (*Ardea novaehollandiae*), cattle egret (*Bubulcus ibis*), paradise shelduck (*Tadorna variegata*), mallard duck (*Anas platyrhynchos*), Australian harrier (*Circus approximans*), pukeko (*Porphyrio porphyrio*), spur-winged plover (*Vanellus miles novaehollandiae*), welcome swallow (*Hirundo tahitica neoxena*), blackbird (*Turdus merula*), fantail (*Rhipidura fuliginosa*), yellowhammer (*Emberiza citronella*), chaffinch (*Fringilla coelebs*), and goldfinch (*Carduelis carduelis*).

The wetland is also home to the gold striped gecko (*Hoplodactylus chrysoireticus*), which is identified as 'Chronically Threatened (Gradual Decline)'.

Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Contains the 'Acutely Threatened' Australasian bittern and the 'At Risk' spotless crane, which is particularly uncommon in Taranaki Also contains the 'Chronically Threatened' gold stripe gecko
Representativeness	High	Contains indigenous vegetation on F5.2b – an 'Acutely Threatened' LENZ environment
Ecological context	Medium	Provides core habitat for the threatened Australasian bittern, spotless crane and gold stripe gecko
Sustainability	Positive	In good vegetative condition. Key ecological processes still influence the site. Under appropriate management, it can remain resilient to existing or potential threats

Other values

The Te Wawa Wetland has cultural significance to Maori. A number of pa sites are present and there is an extensive history of food gathering in and around the wetland area.

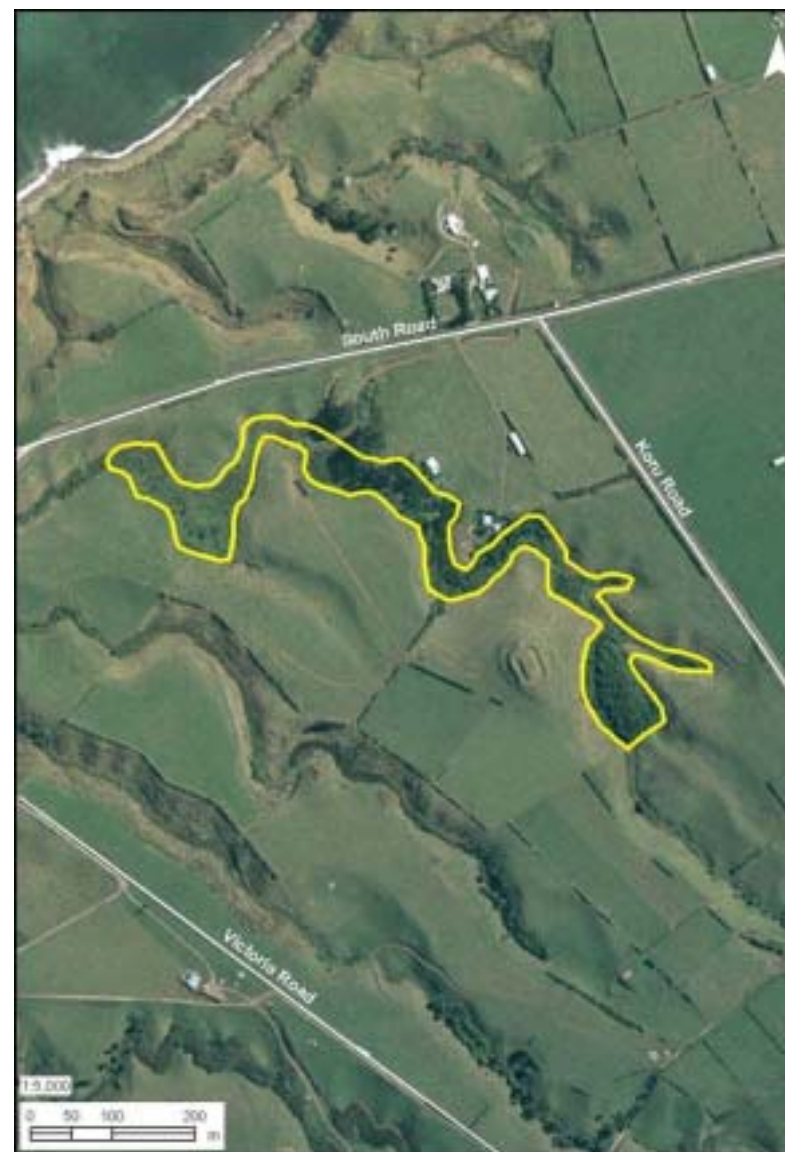
Management threats and response

Potential and actual threats to the sustainability of the Te Wawa Wetland'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	Medium to high	Brush wattle, pampas, blackberry, crack willow, gorse, boxthorn, and Japanese honeysuckle
Habitat modification	Low	Fenced, some past drainage and clearance

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

Site protection	Yes/No	Description
A Public ownership or formal agreement	No	TRC memorandum of encumbrance in process
B Regulatory protection by local government	Yes	Site specific rules apply – Taranaki Regional Council rules for wetlands (refer Appendix III of the Regional Fresh Water Plan) General regional or district rules might also apply
C Active protection	Yes	Fenced Enhancement planting Self Help Possum Control Programme



Te Wera Conservation Covenants

At a glance (last updated: February 2006)																																										
TRC reference:	0896-0	Ecological district:	Matemateaonga																																							
Other reference:	DOC: LAN 5704	LENZ environment:	F1.1c (1.7 ha) F1.1d (90.2 ha) F5.2a (0.4 ha) F7.2a (13.9 ha) H3.1b (8.9 ha)																																							
Land tenure:	Private	Protection status:	A, B																																							
GPS:	1. 2650552E – 6221894N 2. 2650000E – 6222200N 3. 2651010E – 6222900N 4. 2650674E – 6221041N 5. 2650230E – 6220598N 6. 2646654E – 6219019N 7. 2646018E – 6218665N 8. 2648016E – 6218157N 9. 2648585E – 6217757N 10. 2649985E – 6217469N 11. 2649150E – 6220385N 12. 2650601E – 6223777N 13. 2648215E – 6220585N 14. 2647939E – 6219648N 15. 2647315E – 6218950N 16. 2648766E – 6218831N 17. 2652444E – 6222154N 18. 2649460E – 6221136N	Area: <table border="0"> <tr><td>1.</td><td>2.0 ha</td><td>10.</td><td>3.4 ha</td></tr> <tr><td>2.</td><td>5.2 ha</td><td>11.</td><td>2.8 ha</td></tr> <tr><td>3.</td><td>12.9 ha</td><td>12.</td><td>2.8 ha</td></tr> <tr><td>4.</td><td>5.4 ha</td><td>13.</td><td>6.0 ha</td></tr> <tr><td>5.</td><td>3.7 ha</td><td>14.</td><td>7.8 ha</td></tr> <tr><td>6.</td><td>8.8 ha</td><td>15.</td><td>3.9 ha</td></tr> <tr><td>7.</td><td>19.6 ha</td><td>16.</td><td>1.1 ha</td></tr> <tr><td>8.</td><td>2.0 ha</td><td>17.</td><td>12.2 ha</td></tr> <tr><td>9.</td><td>2.0 ha</td><td>18.</td><td>10.0 ha</td></tr> <tr><td colspan="2">Total</td><td colspan="2">115.1 ha</td></tr> </table>	1.	2.0 ha	10.	3.4 ha	2.	5.2 ha	11.	2.8 ha	3.	12.9 ha	12.	2.8 ha	4.	5.4 ha	13.	6.0 ha	5.	3.7 ha	14.	7.8 ha	6.	8.8 ha	15.	3.9 ha	7.	19.6 ha	16.	1.1 ha	8.	2.0 ha	17.	12.2 ha	9.	2.0 ha	18.	10.0 ha	Total		115.1 ha	
1.	2.0 ha	10.	3.4 ha																																							
2.	5.2 ha	11.	2.8 ha																																							
3.	12.9 ha	12.	2.8 ha																																							
4.	5.4 ha	13.	6.0 ha																																							
5.	3.7 ha	14.	7.8 ha																																							
6.	8.8 ha	15.	3.9 ha																																							
7.	19.6 ha	16.	1.1 ha																																							
8.	2.0 ha	17.	12.2 ha																																							
9.	2.0 ha	18.	10.0 ha																																							
Total		115.1 ha																																								

Location

The Te Wera Conservation Covenants are located on private land, approximately 31 km north-east of Stratford. The Covenants lie in the Matemateaonga Ecological District.

General description

The Te Wera Conservation Covenants comprise of 18 scattered small areas of swampy alluvial terrace wetlands, located mainly in the valleys of the Te Wera Forest. The wetlands have a combined area of 115.1 ha and are probably induced ecosystems following forest clearance. The wetlands are

mainly surrounded by pine forestry and regenerating indigenous forest. The wetlands are also known as the Landcorp and Rayonier Te Wera Covenants.

Ecological features

Vegetation

The predominant vegetaton type is raupo (*Typha orientalis*) reedland with some sedges (*Carex* spp), manuka (*Leptospermum scoparium*) and kahikatea (*Dacrycarpus dacrydioides*). Willows (*Salix* spp.) are dominant in some areas.

Fauna

The Te Wera Conservation Covenants contain the 'At Risk (Sparse)' fernbird (*Bowdleria punctata vealeae*) and spotless crane (*Porzana tabuensis plumbea*). The fernbird and spotless crane are particularly uncommon in the region. The 'Acutely Threatened' Australasian bittern (*Botaurus poiciloptilus*) may also be present but populations are unconfirmed.

Other bird species present include New Zealand wood pigeon (*Hemiphaega novaeseelandiae*), which is identified as 'Chronically Threatened (Gradual Decline)', North Island robin (*Petroica australis longipes*), fantail (*Rhipidura fuliginosa*), bellbird (*Anthornis melanura*), grey warbler (*Gerygone igata*), Australasian harrier (*Circus approximans*), silvereye (*Zosterops lateralis*), welcome swallow (*Hirundo tahitica*), and whitehead (*Mohoua novaeseelandia*).

Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Contains and the 'At Risk' fernbird and spotless crane, which are particularly uncommon in Taranaki Also contains the 'Chronically Threatened' New Zealand wood pigeon
Representativeness	High	Contains indigenous vegetation on 'Acutely Threatened' (F5.2a, H3.1b) and 'At Risk' (F1.1c, F7.2a) LENZ environments
Ecological context	High	Being close together, the 18 sites are closely interconnected with one another. The wetlands are also in close proximity and interconnected with other Key Native Ecosystems (Te Wera, Ohura Road 1, Awahou Scenic Reserve, Pohokura swamp, QEII Covenant 5/06/018 and Huiakama Lagoon)
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

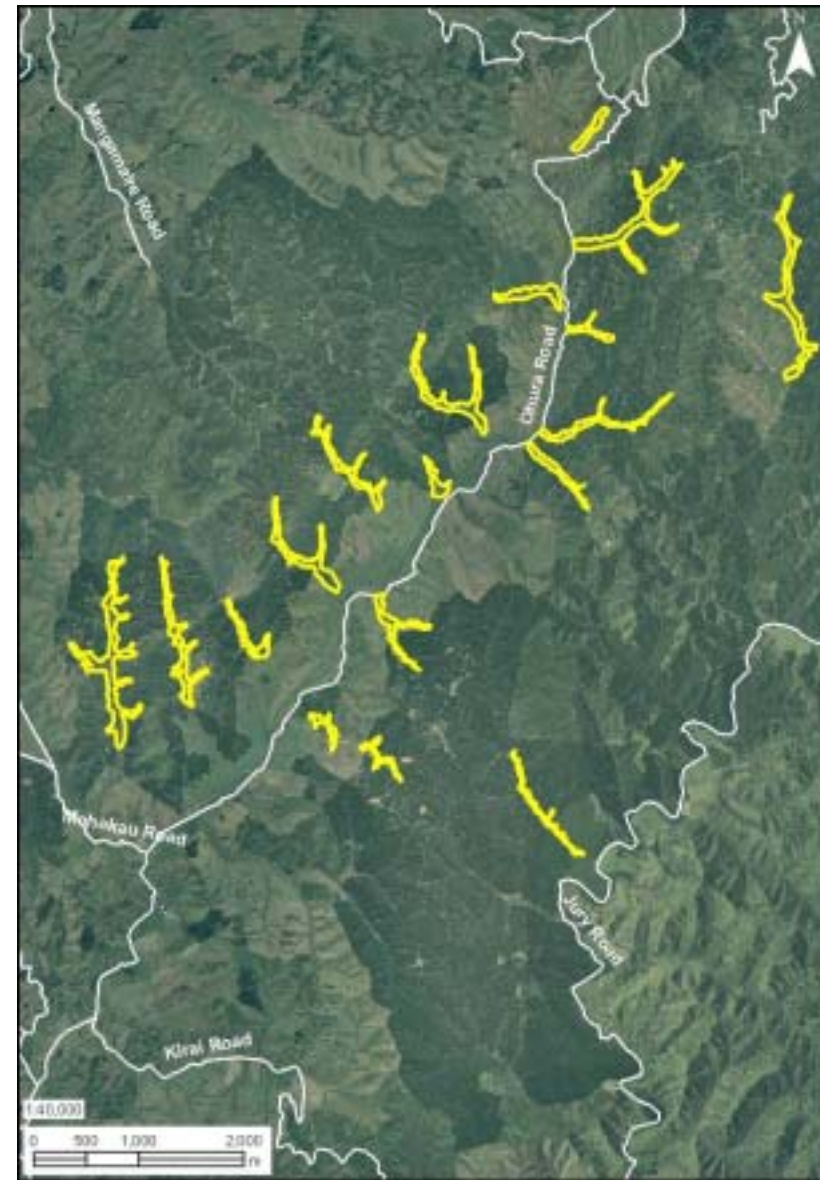
Management threats and response

Potential and actual threats to the sustainability of the Te Wera Conservation Covenants' ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Medium to high	Possums, cats, goats, pigs, hedgehogs, and rats
Weeds	Medium-high	Heavy infestations of willows in some wetlands
Habitat modification	Medium to high	The wetlands are not fenced Forestry clearance on the adjacent land causing sedimentation and other impacts has been a significant problem in recent times

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

Site protection	Yes/No	Description
A Public ownership or formal agreement	Yes	Conservation Covenants with the Department of Conservation
B Regulatory protection by local government	Yes	Site specific rules apply – Taranaki Regional Council rules for wetlands (refer Appendix IIA of the Regional Fresh Water Plan) General regional or district rules might also apply
C Active protection	No	



Toko Wetland

At a glance (last updated: February 2006)			
TRC reference:	0991-0	Ecological district:	Egmont
Other reference:		LENZ environment:	F5.2a
Land tenure:	Private	Protection status:	B, C
GPS:	2627259E – 6205356N	Area:	4.8 ha

Location

The Toko Wetland is located on privately owned land, 3 km south-west of Toko. The wetland lies in the Egmont Ecological District.

General description

This 4.8 ha wetland is located in a tributary of the Patea River. Bordering a quarry, this wetland contains a good variety of wetland and aquatic plants. The wetland provides habitat for several bird species including the nationally threatened grey duck and spotless crane.

Ecological features

Vegetation

Vegetation within the wetland is predominantly raupo (*Typha orientalis*), sedge (*Carex secta*), and goat willow (*Salix cinerea*).

Introduced plants such as goat and crack willow (*Salix fragilis*), broom (*Cytisus scoparius*), gorse (*Ulex europeaus*), barberry (*Berberis glaucarpa*), blackberry (*Rubus fruticos*) and pine trees (*Pinus radiata*), are also present.

The fern *Hypolepis distans* found here is uncommon in Taranaki.

Fauna

The Toko Wetland contains high numbers of grey ducks (*Anas superciliosa*), which are identified as 'Chronically Threatened (Serious Decline)'. Also present are spotless crane (*Porzana tabuensis plumbea*), which are identified as 'At Risk (Sparse)' nationally and are particularly uncommon in Taranaki.

Other birdlife present in the wetland are pukekos (*Porphyrio porphyrio*), mallard ducks (*Anas platyrhynchos*), and black swans (*Cygnus atratus*). Paradise shelduck (*Tadorna variegata*) also visit the site regularly.

Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Contains the 'At Risk' and regionally uncommon spotless crane Also contains the 'Chronically Threatened' grey duck
Representativeness	High	Contains indigenous vegetation on F5.2a – an 'Acutely Threatened' LENZ environment
Ecological context	Medium	Provides core habitat for the threatened grey duck and spotless crane
Sustainability	Positive	In good vegetative condition with a variety of wetland and aquatic plants. 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 Toko Wetland's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Low to medium	A very low density of possums. Mustelids, feral cats, rabbits, and hedgehogs
Weeds	Low to medium	Willows, broom, gorse, barberry and blackberry present
Habitat modification	Medium	The tributary stream receives treated stormwater from a quarry – which is discharged directly to the wetland. Monitoring programme in place for discharge. Partially fenced

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

Site protection	Yes/No	Description
A	Public ownership or formal agreement	No Taranaki Regional Council memorandum of encumbrance in progress
B	Regulatory protection by local government	Yes Site specific rules apply – Taranaki Regional Council rules for wetlands (refer Appendix III of the Regional Fresh Water Plan) General regional or district rules might also apply
C	Active protection	Yes Partially fenced Land owner undertaking willow control Enhancement planting Taranaki Regional Council assisted predator control Self-help Possum Control Programme



Tom and Don's Bush

At a glance (last updated: February 2006)			
TRC reference:	1064-0	Ecological district:	Egmont
Other reference:	NPDC – ID6202 QEII 5/06/037	LENZ environment:	F5.2b
Land tenure:	Private	Protection status:	A, B, C
GPS:	2588700E – 6224300N	Area:	15.5 ha

Location

Tom and Don's Bush is located on privately owned land, 2.6 km east from Okato. The site is within the Egmont Ecological District.

General description

Tom and Don's Bush is a relatively large (15.5 ha) lowland hardwood and podocarp forest remnant, located on an alluvial plain. Vegetation consists of semi-coastal broadleaved forest.

Tom and Don's Bush is situated on moderately steep hill slopes with the Katikara Stream marking the south-western boundary. There are two smaller streams running through gullies in the covenant area in a generally north-west direction. One of the streams bisects the property from east to west, while the other stream originates from within the area itself. The area is surrounded by farmland on all sides but a number of other Key Native Ecosystems are nearby – Maitahi Wetland lies 3.5 km to the west, while to the south lies QEII 5/06/102 and the Corbett Lake Scenic Reserve.

Ecological features

Vegetation

A diverse range of plant species is present within Tom and Don's Bush. Forest type within the bush is tawa (*Beilschmiedia tawa*) – pukatea (*Laurelia novae zelandiae*) – kohekohe (*Dysoxylum spectabile*) forest with occasional rewarewa (*Knightia excelsa*) and rimu (*Dacrydium cupressinum*). The sub-canopy consists mainly of tree ferns, including silver fern (*Cyathea dealbata*), black tree fern (*C. medullaris*), soft tree fern (*C. smithii*), rough tree fern (*Dicksonia squarrosa*), and mahoe (*Meliclytus ramiflorus*).

The shrub and ground tiers contain large numbers of kawakawa (*Macropiper excelsum*), kanono (*Coprosma grandifolia*) and seedlings of pukatea. Matata (*Histiopteris incisa*) and pigeonwood (*Hedycarya arborea*) are also present.

There are some large patches of African clubmoss (*Selaginella kraussiana*) on hill slopes toward the southern end of the forest.

Fauna

Tom and Don's Bush provides habitat for New Zealand pigeon (*Hemiphaga novaeseelandiae*), which is identified as 'Chronically Threatened (Gradual Decline)'. Bellbird (*Anthornis melanura melanura*), tui (*Prosthemadera novaeseelandiae*), North Island fantail (*Rhipidura fuliginosa placabilis*) and silvereye (*Zosterops lateralis lateralis*) are also present.

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	Close to and interconnected with other small forest remnants and riparian vegetation in vicinity
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 Tom and Don's Bush's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Low to medium	Possums, mustelids, rats, and mice
Weeds	Low	African clubmoss, ragwort, and blackberry
Habitat modification	Low	Formally protected and fenced

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

Site protection	Yes/No	Description
A	Yes	QEII Covenant
B	Yes	Site specific rules apply – New Plymouth District Council rules for Significant Natural Areas (refer Appendix 21 of the District Plan) General regional or district rules might also apply
C	Yes	Fully fenced Self-help Possum Control Programme



Townsend Road

At a glance (last updated: February 2006)			
TRC reference:		Ecological district:	Egmont
Other reference:	NPDC – SNA 25	LENZ environment:	F5.2b
Land tenure:	Private	Protection status:	B, C
GPS:	2609902E – 6238569N	Area:	7.8 ha

Location

Townsend Road is located on privately owned land, 1.9 km south from Bell Block. The site lies in the Egmont Ecological District.

General description

Townsend Road is a relatively small (7.8 ha) semi-coastal forest remnant located on uplifted marine terrace. Less than 1% of this forest type remains in the Ecological District.

The site is located close to other Key Native Ecosystems – to the south lies the Mangameimi Remnant Bush (0.6 km), Dorset Road Bush (2.6 km), Umutekai Bush (3.7 km), and Tarurutangi Swamp (3 km).

Ecological features

Vegetation

The main canopy species are kohekohe (*Dysoxylum spectabile*) and puriri (*Vitex lucens*) on the drier upper slope while pukatea (*Laurelia novaezelandiae*) is frequent in the gully. Other canopy associates include tawa (*Beilschmiedia tawa*), karaka (*Corynocarpus laevigatus*), and rewarewa (*Knightia excelsa*).

Fauna

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

Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	Low	Not known to contain any 'Acutely Threatened' species or species uncommon in Taranaki
Representativeness	High	Contains indigenous vegetation on F5.2b – an 'Acutely Threatened' LENZ environment
Ecological context	Medium	In close proximity and interconnected with other Key Native Ecosystems (Mangameimi Remnant Bush, Dorset Road Bush, Umutekai Bush and Tarurutangi Swamp)
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 Townsend Road'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	

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

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



Tuihu Conservation Area

At a glance (last updated: February 2006)			
TRC reference:		Ecological district:	North Taranaki
Other reference:	DOC 70002	LENZ environment:	F1.1b (159.8 ha) F5.2a (3.0 ha) F7.2a (0.5 ha)
Land tenure:	Crown	Protection status:	A, B
GPS:	2632034E – 6223660N	Area:	163.3 ha

Location

The Crown owned Tuihu Conservation Area is located 17.4 km east of Inglewood. The Conservation Area lies in the North Taranaki Ecological District.

General description

The Tuihu Conservation Area, which is administered by the Department of Conservation, comprises of a large (163.3 ha) riparian strip of podocarp-hardwood forest adjoining the Waitara River. It is one of the few areas of primary forest remaining in the southern part of the ecological district, and representative of the lowland forest of the lower Waitara Catchment.

Ecological features

Vegetation

Rimu (*Dacrydium cupressinum*) emergent over a canopy of tawa (*Beilschmiedia tawa*) forest. Kamahi (*Weinmannia racemosa*) and hinau (*Elaeocarpus dentatus*) are also frequent in the canopy.

Fauna

Native birds present include the North Island brown kiwi (*Apteryx australis mantelli*), which is identified as 'Chronically Threatened (Serious Decline)', and the New Zealand pigeon (*Hemiphaga novaseelandiae*), which is identified as 'Chronically Threatened (Gradual Decline)'.

Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	Medium	Contains the 'Chronically Threatened' North Island brown kiwi and New Zealand pigeon
Representativeness	High	Contains indigenous vegetation on 'Acutely Threatened' (F5.2a) and 'At Risk' (F7.2a) LENZ environments
Ecological context	High	Connected to other large forest remnants in the area
Sustainability	Positive	Self sustaining forest in good 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 Tuihu Conservation Area's ecological values are as follows:

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

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

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



Tuipake

At a glance (last updated: February 2006)			
TRC reference:		Ecological district:	North Taranaki
Other reference:	NPDC SNA 14	LENZ environment:	F1.1b (94.3 ha) D2.3a (16.5 ha) F1.1c (35.3 ha)
Land tenure:	Private	Protection status:	B
GPS:	2642514E – 6231359N	Area:	146.1 ha

Location

Tuipake is located on privately owned land, 1 km east from Inglewood. The site lies in the North Taranaki Ecological District.

General description

Tuipake is a relatively large area (146.1 ha) of secondary and induced forest types on dissected hill country. It connects the Pouiatua Conservation Area with the Waitara River, making a natural boundary. It contains well developed stands of kanuka, an uncommon forest type in the North Taranaki Ecological District, and rare on such a large scale.

Ecological features

Vegetation

Vegetation in Tuipake is predominantly kanuka (*Kunzea ericoides* var. *ericoides*) forest on the hillslope and ridge. Manuka (*Leptospermum scoparium*), which is present on the hillslope, ridge and cliff is also present.

Fauna

No specific indigenous fauna species have been recorded for Tuipake. However, North Island brown kiwi (*Apteryx australis mantelli*), which is identified as 'Chronically Threatened (Serious Decline)', and New Zealand pigeon (*Hemiphaga novaeseelandiae*), which is identified as 'Chronically Threatened (Gradual Decline)' are known to be present in nearby areas and suspected to be present in this 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	Medium	Contains indigenous vegetation on 'At Risk' (F1.1c, D2.3a) LENZ environments
Ecological context	High	Adjacent to and interconnected with another Key Native Ecosystem – (Pouiatua Conservation Area) and the Waitara River
Sustainability	Positive	Large area 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 Tuipake's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Medium to high	Possums, mustelids, rats, and mice
Weeds	Low	
Habitat modification	Low	Natural boundaries prevent stock access

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

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



Umutekai Bush and Conservation Area

At a glance (last updated: February 2006)			
TRC reference:	0914-0 0876-0	Ecological district:	Egmont
Other reference:	NPDC SNA 22 QEII 5/06/103 DOC 70419	LENZ environment:	A5.3a (25.5 ha) C1.1a (3.9 ha) C 1.2a (7.8 ha) F5.2b (12.2 ha)
Land tenure:	1. Private (46.8 ha) 2. Crown (2.6 ha)	Protection status:	A, B, C
GPS:	1. 2608244E – 6234480N and 2608532E – 6234651N 2. 2608369E – 6234785N	Area:	1. 46.8 ha 2. 2.6 ha Total 49.4 ha

Location

The Umutekai Bush and Conservation Area is located 3 km south east of New Plymouth. It is in the Egmont Ecological District.

General description

The Umutekai Bush and Conservation Area include three remnants of privately owned land with a combined area of 46.8 ha and the adjacent Crown owned Umutekai Conservation Area, which is another 2.6 ha. The combined area is 49.4 ha in size, the largest forest remnant on the lower ring plain and is significant as the only remnant of a type that was previously common in other poorly drained fertile areas on the Pouakai Ring Plain.

Umutekai Bush includes a large semi-coastal forest remnant on the Pouakai Ring Plain with an adjoining lake in the Conservation Area. The site is located between the headwaters of the Manganaha and the Mangemiemi



streams (two small tributaries of the Waiwhakaiho River).

Ecological features

Vegetation

Umutekai Bush comprises of kahikatea (*Dacrycarpus dacrydioides*) - pukatea (*Laurelia novaezealandiae*) forest, kahikatea forest, tawa (*Beilschmiedia tawa*) - rewarewa (*Knightia excelsa*) forest and raupo reedland. Beneath the canopy layer is a thick undergrowth of small trees, shrubs and lianes, particularly kiekie (*Freycinetia baueriana* subsp. *banksii*) and supplejack (*Ripogonum scandens*). The regionally rare fern *Deparia petersenii* is also present (it is the only known site of this plant in Taranaki).

Around the edges of the forest there is reedland dominated by raupo (*Typha orientalis*) and *Carex* species, shrubland dominated by *Coprosma tenuicaulis*, and areas of regenerating forest.

The Umutekai Conservation Area consists largely of flax (*Phormium tenax*) and kahikatea forest around the lake margins. Also present are cabbage trees (*Cordyline australis*) and raupo reedland.

Fauna

Birdlife in the Umutekai Bush includes New Zealand pigeon (*Hemiphaga novaeseelandiae*), which is identified as 'Chronically Threatened (Gradual Decline)', and New Zealand dabchick (*Poliiocephalus poliocephalus*), which is identified as being nationally 'At Risk (Sparse)'.

Other native birds present include tui (*Prosthemadera novaeseelandiae*), bellbird (*Anthornis melanura*), fantail (*Rhipidura fuliginosa*), grey warbler (*Gerygone igata*), silvereye (*Zosterops lateralis*), Australasian harrier (*Circus approximans*), and pukeko (*Porphyrio porphyrio*).

A number of introduced bird species are also present. Lake Umutekai contains a large number of waterfowl, and is a moulting site for paradise shelduck (*Tadorna variegata*).

Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Regionally distinctive in that it is the only known site in Taranaki where the fern <i>Deparia petersenii</i> is found. Also contains the 'Chronically Threatened' New Zealand pigeon
Representativeness	High	Contains indigenous vegetation on 'Acutely Threatened' (A5.3a,

		C1.2a, F5.2b) and 'Chronically Threatened' (C1.1a) LENZ environments
Ecological context	High	Provides core and buffering habitat for the regional rare <i>Deparia petersenii</i> and threatened New Zealand pigeon and New Zealand dabchick. Also the only remnant of semi-coastal swamp forest on the Pouakai Ring Plain. Close to other forest remnants.
Sustainability	Positive	Large area in good vegetative condition. Key ecological processes still influence the site. Under appropriate management it can remain resilient to existing or potential threats.

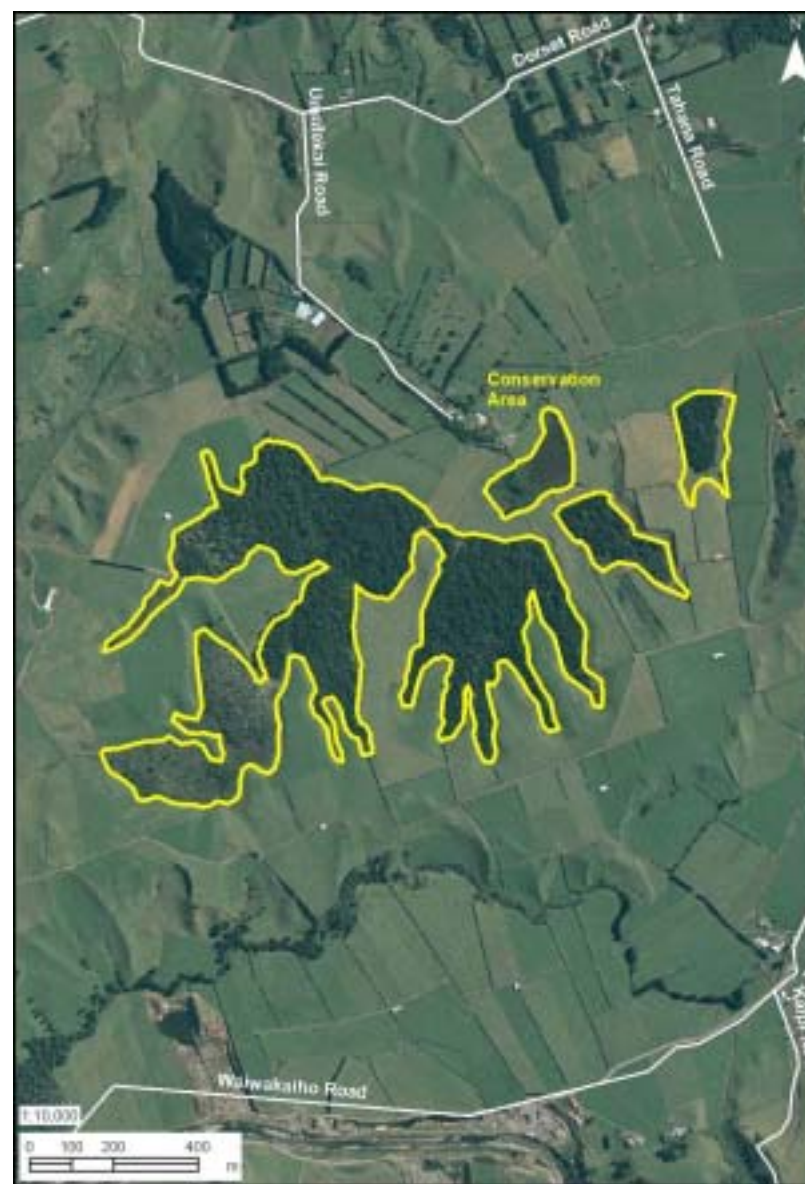
Management threats and response

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

Threats to ecological values	Level of risk	Comment
Pest animals	Low to medium	Possums, rabbits, hares, mustelids, rats, cats, and hedgehogs
Weeds	Low	Some woolly nightshade (<i>Solanum mauritianum</i>) on edges only
Habitat modification	Low	Formally protected and fenced

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

Site protection	Yes/No	Description
A Public ownership or formal agreement	Yes	QEII Covenant Public Conservation Estate (Conservation Area)
B Regulatory protection by local government	Yes	Site specific rules apply – Taranaki Regional Council rules for wetlands (refer Appendix IIA and B of the Regional Fresh Water Plan) – 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	Largely fenced Self-help Possum Control Programme (on private land) Department of Conservation possum control (in Conservation Area)



Urenui River Mouth

At a glance (last updated: February 2006)			
TRC reference:		Ecological district:	North Taranaki
Other reference:	DOC RAP NPDC SNA 9	LENZ environment:	C1.2a (0.3 ha) F5.2a (4.3 ha)
Land tenure:	Private	Protection status:	B
GPS:	2630257E – 6244933N	Area:	4.6 ha

Location

The Urenui River Mouth is located on privately owned land, just north of the township of Urenui. It lies in the North Taranaki Ecological District.

General description

The Urenui River Mouth comprises of a small (4.6 ha) strip of secondary coastal forest on a steep riverbank. It lies on the true left bank of the Urenui River at the river mouth.

Ecological features

Vegetation

The Urenui River Mouth comprises of karaka (*Corynocarpus laevigatus*) – kohekohe (*Dysoxylum spectabile*) – mamaku (*Cyathea medullaris*) forest.

Notable species present include wharangi (*Melicope ternata*) and *Fuchsia perscandens* both uncommon in Taranaki.

Fauna

Unknown. No specific indigenous fauna species have been recorded for the Urenui river mouth.

Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	Low	Not known to contain 'Acutely Threatened' or regionally uncommon species
Representativeness	High	Contains indigenous vegetation on 'Acutely Threatened' (C1.2a, F5.2a) LENZ environments
Ecological context	Medium	Similar forest at Onaero rivermouth
Sustainability	Positive	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 Urenui River Mouth'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	

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

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



Uruti Conservation Area

At a glance (last updated: February 2006)			
TRC reference:	0856-0	Ecological district:	North Taranaki
Other reference:	DOC 70303	LENZ environment:	C1.2a (7.4 ha) D2.3c (0.4 ha) F1.1b (206.8 ha) F5.2a (1.0 ha) F7.2a (28.6 ha)
Land tenure:	Crown	Protection status:	A, B, C
GPS:	2644391E – 6252996N	Area:	244.2 ha

Location

The Crown owned Uruti Conservation Area which is located 16 km north-east of Urenui. The Conservation Area lies in the North Taranaki Ecological District.

General description

The Uruti Conservation Area, which is administered by the Department of Conservation, comprises of vegetated hill slopes. It is primarily made up of coastal and podocarp hardwood forest but there is also a small 2.6 ha palustrine wetland located on the margin of the Mimi River. The total size of the Conservation Area is 244.2 ha.

Ecological features

Vegetation

The wetland supports raupo (*Typha orientalis*) with some cabbage trees (*Cordyline australis*) also being present.

The surrounding primary coastal and podocarp hardwood forest contains puriri (*Vitex lucens*), karaka (*Corynocarpus laevigatus*), tawa



(*Beilschmiedia tawa*), rimu (*Dacrydium cupressinum*), mangleo (*Litsea calicaris*), kohehohe (*Dysoxylum spectabile*), and regenerating kahikatea (*Dacrycarpus dacrydioides*).

Fauna

The Uruti Conservation Area Swamp contains a wide variety of birdlife including fernbird (*Bowdleria punctata vealeae*) and spotless crane (*Porzana tabuensis plumbea*) – both of which are identified as 'At Risk (Sparse)' nationally and are particularly uncommon in Taranaki.

Tomtit (*Petroica macrocephala*) and bellbird (*Anthornis melanura melanura*), are also present.

The wetland also provides a significant native fishery. An unnamed tributary of the Mimi River runs through the swamp and provides important habitat for whitebait.

Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Contains the 'At Risk' fernbird and spotless crane, which are particularly uncommon in Taranaki
Representativeness	High	Contains indigenous vegetation on 'Acutely Threatened' (C1.2a, F5.2a) and 'At Risk' (D2.3a, F7.2a) LENZ environments
Ecological context	Medium	Connected to the adjacent Mimi River and providing buffering and core habitat for threatened species and 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 Uruti Conservation Area'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	High	High density of Japanese walnut trees
Habitat modification	Low	No apparent stock access, partially fenced

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

Site protection	Yes/No	Description
A Public ownership or formal agreement	Yes	Public Conservation Estate (Conservation Area)
B Regulatory protection by local government	Yes	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
C Active protection	Yes	Partially fenced



Uruti Scenic Reserve

At a glance (last updated: February 2006)

TRC reference:		Ecological district:	North Taranaki
Other reference:	LD No 43A, DOC 70425	LENZ environment:	F1.1b (336.0 ha) F1.1d (50.6 ha) F5.2a (0.3 ha) F7.2a (5.8ha)
Land tenure:	Crown	Protection status:	A, B
GPS:	2647499E – 6244282N	Area:	392.7ha

Location

The Crown owned Uruti Scenic Reserve lies 45 km north-east of New Plymouth. It lies in the North Taranaki Ecological District.

General description

The Uruti Scenic Reserve comprises of highly dissected sedimentary terrain with deep valleys containing streams and high steep-sided ridges which form a water catchment for the Uruti Stream.

Ecological features

Vegetation

Tawa (*Beilschmiedia tawa*) forest covers most of the Uruti Scenic Reserve with pure stands of hard beech (*Nothofagus truncata*) occurring locally on sandstone outcrops and ridgetops. Tawa has associates of hinau (*Elaeocarpus dentatus*), miro (*Prumnopitys ferruginea*), kamahi (*Weinmannia racemosa*) and thin-barked totara (*Podocarpus hallii*) in the canopy with some large rata (*Metrosideros robusta*) and rimu (*Dacrydium cupressinum*) occasionally emergent above the canopy.

As the Reserve is at 39 degrees south latitude it contains some species at or near their disributional limit including the club moss (*Lycopodium deuterodensum*) and mangeao (*Litsea calicaris*). 39 degrees south latitude marks the transition zone where hard beech from the north meets black beech from the south, with associated hybrids. While hard beech is recorded in this Reserve both hard and black beech are present in the nearby Moki Reserve (2.5 km north-east).

Fauna

Notable birdlife present in the Uruti Scenic Reserve include the 'Chronically Threatened (Gradual Decline)' New Zealand pigeon (*Hemiphaga novaseelandiae*) and the 'Chronically Threatened (Serious Decline)' North Island brown kiwi (*Apteryx mantelli*).

Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	Medium	Contains the 'Chronically Threatened' New Zealand pigeon and North Island brown kiwi
Representativeness	High	Small area of an 'At Risk' (F7.2a) LENZ environments
Ecological context	High	Ecologically unique in terms of the site representing the distributional limits of several species, including hybrids between black and hard beech. Kohekohe forest on colluvial slopes uncommon in North Taranaki Adjoins and is interconnected with other Key Native Ecosystems – Miro and Moki Scenic Reserves and Waiwhekeho 1 and Waiwhekeho 2
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 Uruti Scenic Reserve's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Medium	Possums, goats, cats, mustelids, rats, and stock
Weeds	Low-medium	No known
Habitat modification	Low	Some past logging in parts

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

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



Waihi Stream Wetland

At a glance (last updated: February 2006)

TRC reference:	0836-0	Ecological district:	North Taranaki
Other reference:	NPDC SNA 1	LENZ environment:	F5.2b
Land tenure:	Private	Protection status:	B, C
GPS:	2650030E – 6274577N	Area:	1.9 ha

Location

The Waihi Stream Wetland is located on privately owned land, 2 km south of Mokau. It lies in the North Taranaki Ecological District.

General description

The Waihi Stream Wetland is 1.9 ha in size and is formed on a marine terrace near the mouth of the Waihi Stream. This coastal wetland contains a number of unique vegetation types, including the only known record of the rush *Juncus caespiticius*, in the North Taranaki Ecological District.

Ecological features

Vegetation

The Waihi Stream Wetland comprises of sedgeland dominated by swamp millet (*Isachne globosa*), sedge (*Isolepis prolifer – Eleocharis*), flax (*Phormium tenax*), and toetoe (*Cortaderia toetoe*). Some cabbage trees (*Cordyline australis*) are also present.

The Waihi Stream Wetland is the only known location of *Juncus caespiticius*, a grass/flat-leaved rush, in the North Taranaki Ecological District.



Fauna

Unknown. No specific indigenous fauna species have been recorded for the Waihi Stream Wetland.

Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Regionally distinctive in that it is the only known location of the indigenous grass/flat-leaved rush (<i>Juncus caespiticius</i>) in the North Taranaki Ecological District
Representativeness	High	Contains indigenous vegetation on F5.2b – an 'Acutely Threatened' LENZ environment
Ecological context	Medium	Provides buffering and core habitat for the regionally rare <i>Juncus caespiticius</i>
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 Waihi Stream Wetland's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Medium to high	Possums, cats, mustelids, goats, and rats
Weeds	Low	
Habitat modification	Medium	A sand dune has buried part of the fence, which allows stock access to the wetland

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

Site protection	Yes/No	Description
A Public ownership or formal agreement	No	
B Regulatory protection by local government	Yes	Site specific rules apply – Taranaki Regional Council rules for wetlands (refer Appendix IIA of the Regional Fresh Water Plan) – New Plymouth District Council rules for Significant Natural Areas (refer Appendix 21 of the District Plan) General regional or district rules might also apply
C Active protection	Yes	The wetland is fenced



Waikekeho 1

At a glance (last updated: February 2006)			
TRC reference:		Ecological district:	North Taranaki
Other reference:	NPDC SNA 10	LENZ environment:	F1.1b
Land tenure:	Private	Protection status:	B
GPS:	2647482E – 6246848N	Area:	39.9 ha

Location

Waikekeho 1 is located on privately owned land, 16.5 km north-east of Urenui. It lies in the North Taranaki Ecological District.

General description

Waikekeho 1 is a relatively large area (39.9 ha) of primary and secondary forest on steep hill country. The Waikiekieho Stream and an unnamed tributary of the Uruti Stream meander through the area. The forest connects with the Uruti Scenic Reserve and the Tangitu and Rerekino conservation areas and includes hard beech forest and associated vegetation, which is largely absent from these reserves. Waikekeho 2, a similar remnant, lies approximately 3 km south.

Ecological features

Vegetation

The most common forest on the ridges is hard beech (*Nothofagus truncata*) with tawa (*Beilschmiedia tawa*) – kamahi (*Weinmannia racemosa*) forest on the hillslopes. There is also a tongue of secondary manuka (*Leptospermum scoparium*)-mamaku (*Cyathea medullaris*) scrub. *Dracophyllum strictum* dominates the scrub on cliffs.

Notable species present in the area include the regionally uncommon willow-leaved maire (*Mida salicifolia*) and kauri grass (*Astelia trinervia*) and *Lycopodium deuterodensum*, which are both near their southern limits in the North Island.

Fauna

Unknown. No specific indigenous fauna species have been recorded for Waikekeho 1.

Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	Low	Not known to contain any 'Acutely Threatened' species or species uncommon to Taranaki
Representativeness	Low	LENZ environment not threatened
Ecological context	High	Provides connection between Moki and Miro Scenic Reserves and provides buffer and core habitat for regionally rare and distinctive flora species noted in those reserves
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 Waikekeho 1's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Medium to high	Possums, hares, rabbits, and rats
Weeds	Low	
Habitat modification	Low to medium	Stock grazing

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

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



Waikekeho 2

At a glance (last updated: February 2006)			
TRC reference:		Ecological district:	North Taranaki
Other reference:	NPDC SNA 11	LENZ environment:	F1.1b (46.5 ha) F1.1d (21.2 ha) F7.2a (1.5 ha)
Land tenure:	Private	Protection status:	B
GPS:	2648003E – 6243311N	Area:	69.6 ha

Location

Waikekeho 2 is located on privately owned land, 17 km east of Urenui. It lies in the North Taranaki Ecological District.

General description

Waikekeho 2 is a relatively large area (69.6 ha) of primary and secondary forest on hill country which drains into an unnamed tributary of the Tangitu Stream. The forest connects with the Uruti Scenic Reserve and the Tangitu and Rerekino conservation areas and includes hard beech forest and associated vegetation, which is largely absent from these reserves.

Waikekeho 1, a similar remnant, lies approximately 3 km north.

Ecological features

Vegetation

The most common forest on the ridges are the regionally uncommon hard beech (*Nothofagus truncata*) and tawa (*Beilschmiedia tawa*) – kamahi (*Weinmannia racemosa*) dominated. There is also black beech (*Nothofagus solandri*), hard beech hybrids, mamaku (*Cyathea medullaris*), and manuka (*Leptospermum scoparium*). The scrub *Dracophyllum strictum* dominates the cliff.

Notable species present in the area include the regionally uncommon willow-leaved maire (*Mida salicifolia*) and kauri grass (*Astelia trinervia*) and *Lycopodium deuterodensum*, which are both near their southern limits in the North Island.

Fauna

Unknown. No specific indigenous fauna species have been recorded for Waikekeho 2.

Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Regionally distinctive through the presence of regionally uncommon hard beech, willow-leaved maire, kauri grass and <i>Lycopodium deuterodensum</i>
Representativeness	Low	Contains small area of indigenous vegetation on F7.2a – an 'At Risk' LENZ environment
Ecological context	Medium	Interconnected with the Uruti, Moki and Miro scenic reserves and provides buffer and core habitat for regionally rare and distinctive flora species
Sustainability	Positive	In good vegetative condition. Key ecological processes still influence the site. Under appropriate management, it can remain resilient to existing or potential threats

Management threats and response

Potential and actual threats to the sustainability of Waikekeho 2's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Pest animals	Medium to high	Possums, hares, rabbits, and rats
Weeds	Low	
Habitat modification	Low to medium	Stock grazing

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

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

