

Peter and Margaret Atkinson

At a glance

TRC Reference: BD/9610	LENZ:	F5.2b Acutely threatened
Ecological District: Egmont	National:	Priority 1 – Threatened Land Environment
Land Tenure: Private	Regional:	Potential KNE
Area(ha): 1.9	Regional Ecosystem Loss:	Chronically threatened 10-20% left
GPS: 1690360X & 5670012Y	Catchment:	Huatoki (389)
Habitat: Forest Remnant		
Bioclimatic Zone: Semi-Coastal		
Ecosystem Type: WF13: Tawa, kohekohe, rewarewa, hinau, podocarp forest		

General Description

The site is a 1.9ha remnant of semi-coastal forest with a canopy dominated by tawa, rewarewa, rimu and pukatea. The ecosystem type is classified as WF13, tawa, kohekohe, rewarewa, hinau, podocarp forest. The remnant is part of a larger area of indigenous and exotic forest that is contiguous with the Ratapihipihi scenic reserve. The remnant is an example of cutover old forest with a reasonable canopy cover and regenerating undergrowth. The site borders the Upper Mangaotuku KNE and provides good connectivity to other Key Native Ecosystems in the area including Berridge twin bush, Omata Bush, Barrett Lake Scenic Reserve and the Ratapihipihi Scenic Reserve.

Ecological Features

Flora

The main canopy of the remnant is dominated by pukatea, tawa, rimu and rewarewa. The lower canopy is dominated by mahoe, pigeonwood, tree ferns and young nikau. A good mix of seedlings and saplings are present including kawakawa, mapou, pigeonwood and coprosmas. A variety of native ferns are also present in the groundcover. The area is classified as an 'Acutely Threatened' land environment (F5.2b). The ecosystem type is classified as WF13, Tawa, kohekohe, rewarewa, hinau, podocarp forest.

Fauna

Bird life in the remnant is fairly typical for the margin of the New Plymouth urban area. Tui are common and other native birds are present such as kereru, fantail, and grey warbler. Good habitat exists for native reptiles including epiphytes, loose bark, abundant foliage, leaf litter and forest ground cover. A small stream runs through the remnant and there is habitat for native fish. The site will contain a diverse range of invertebrates which may include notable species such as peripatus.

Ecological Values

Representativeness - High	The ecosystem type is WF13, Tawa, kohekohe, rewarewa, hinau, podocarp forest which is classified as 'Chronically Threatened'. Over 80% of this type of forest has been lost in the Taranaki region.
Rarity and Distinctiveness - Medium	The 'at risk' king fern is present at the site. The Mangaotuku steam also provides habitat for the 'regionally distinctive' banded kokopu.
Ecological context - High	The site provides important connectivity with other KNE's in the area and is part of the largest block of tall stature vegetation on the western outskirts of New Plymouth. The site is directly adjacent to the Upper Mangaotuku KNE.

Sustainability - Positive

Key ecological processes still influence the site and with appropriate management, it can remain resilient to existing or potential threats.

Other Management Issues

Weeds - High

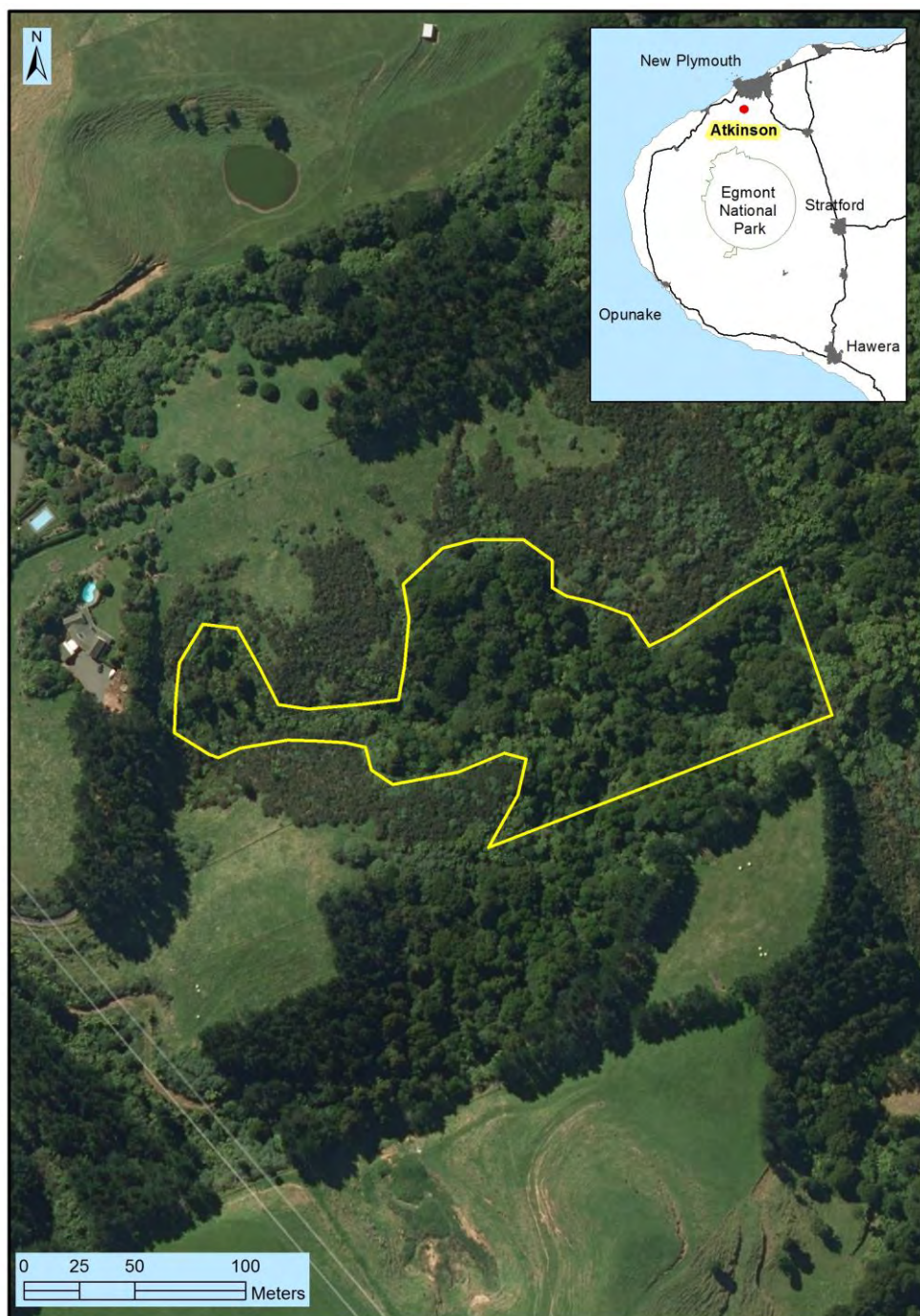
There are very few weed issues in the more mature areas of the remnant. There are challenging weeds present in the regenerating areas. Weeds include woolly nightshade, brush wattle and gorse.

Predators - High

Possums, cats, mustelids, hedgehogs and rats.

Habitat Modification - Low

The landowner is working with the QEII trust to establish a covenant on the site.



Donald QEII

At a glance

TRC Reference: BD/9612	LENZ:	F5.2b Acutely threatened
Ecological District: Egmont	National:	Priority 1 – Threatened Land Environment
Land Tenure: Private		Priority 2 – Sand Dunes and Wetlands
Area(ha): 1.2	Regional:	Potential KNE
GPS: 1686508X & 5672240Y	Regional Ecosystem Loss:	Chronically threatened 10-20% left
Habitat: Forest Remnant/Wetland	Protection Status:	QEII Covenant
Bioclimatic Zone: Semi-Coastal	Catchment:	Wairere (387)
Ecosystem Type: WF13: Tawa, kohekohe, rewarewa, hinau, podocarp forest		

General Description

Donald KNE consists of a 1.2ha semi-coastal forest and wetland at the head of small gully system of the Wairere Stream catchment. This site is an excellent example of semi-coastal kohekohe forest and contains jointed fern, a notable flora species for Taranaki. Forest remnants like this are under-represented in Taranaki owing to widespread clearance for agriculture and urban development. Donald QEII is in close proximity to other Key Native Ecosystems such as Tapuae coastal strip, Berridge twin bush, Woodside and Omata School.

Ecological Features

Flora

The main canopy of the remnant is dominated by kohekohe, rewarewa, pukatea, rata and puriri. A number of other plant species are also present in the sub canopy including karaka, mamaku, kawakawa, pigeonwood, various coprosmas, silver fern/ponga and mahoe.

Fauna

Native birdlife recorded in and around the site include the New Zealand pigeon, tui, grey warbler, fantail, silveryeye and sacred kingfisher. Good habitat exists for reptiles which may include notable species. Longfin eel seen in stream flowing through the site.

Ecological Values

Ecological Context - Medium	Provides habitat for specific indigenous species and is in close proximity to other Key Native Ecosystems in the area, including Woodside, Berridge twin bush, Tapuae Coastal strip and Te wawa wetland.
Representativeness - High	Contains vegetation on a land environment classified as 'Acutely Threatened' (F5.2b) and is valuable as a remnant of a greatly reduced ecosystem type within the region.
Rarity and Distinctiveness - Medium	Provides habitat for the regionally distinctive jointed fern (<i>Arthropteris tenella</i>).
Sustainability - Positive	Key ecological processes still influence the site and with appropriate management, it can remain resilient to existing or potential threats.

Other Management Issues

Weeds - High

Control of high risk species required for Tradescantia, woolly nightshade, Japanese spindle tree, wattle and convolvulus.

Possum Self-help

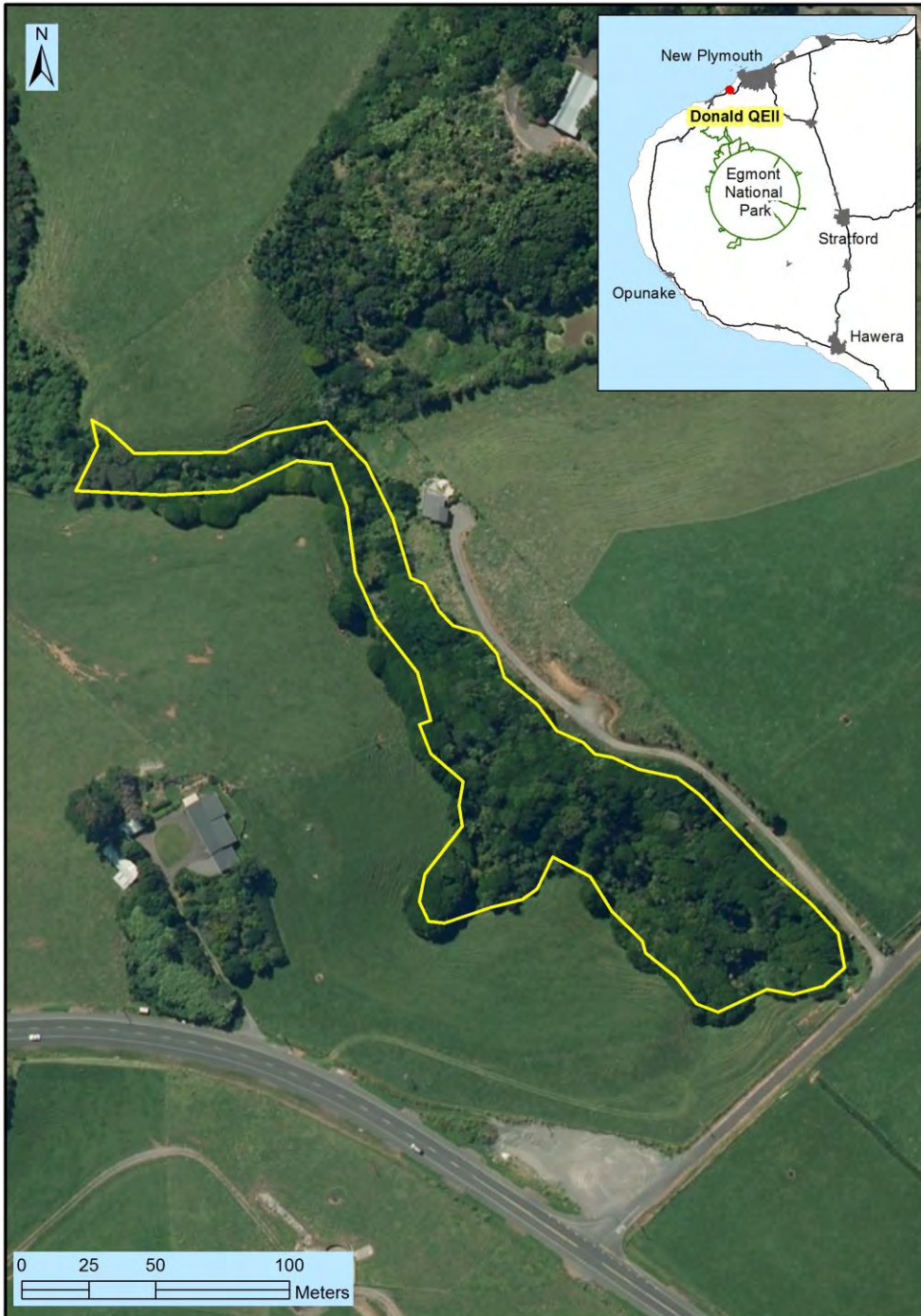
Site is in the possum Self Help programme.

Predators - High

Predator control required to help reduce rats, hedgehogs and mustelids at the site.

Habitat Modification - Low

Protected by QEII covenant conditions.



Hall's Bush

At a glance

TRC Reference: BD/9620	LENZ:	F5.2a Acutely threatened
Ecological District: Egmont	National:	Priority 1 – Threatened Land Environment
Land Tenure: Private	Regional:	Key Native Ecosystem
Area(ha): 4.8	Regional Ecosystem Loss:	Less reduced >50% left
GPS: 1696071X & 5664240Y	Catchment:	Waiwhakaiho (392)
Habitat: Forest Remnant		
Bioclimatic Zone: Lowland		
Ecosystem Type: MF7.2: Rata, tawa, kamahi, podocarp forest		

General Description

The Hall's Bush forest remnant is located 3.4kms from Egmont Village and is located in the Egmont Ecological District and Waiwhakaiho River catchment. Hall's Bush consists of a small (4.8ha) cutover lowland forest remnant dominated by tawa and is situated on flat land next to Albert Road. Notable species present include the 'Regionally Distinctive' swamp maire. Other notable species may be present including freshwater fish and reptiles. The site provides connectivity with other forest remnants, habitat corridors and Key Native Ecosystems in the area.

Ecological Features

Flora

The forest remnant canopy is dominated by tawa with occasional pukatea, rewarewa, pigeonwood and mahoe. Notably, occasional swamp maire saplings are present in the understory which is dominated by kanono, pigeonwood, mahoe and tree ferns. Ground cover, climbers and epiphytes are common.

Fauna

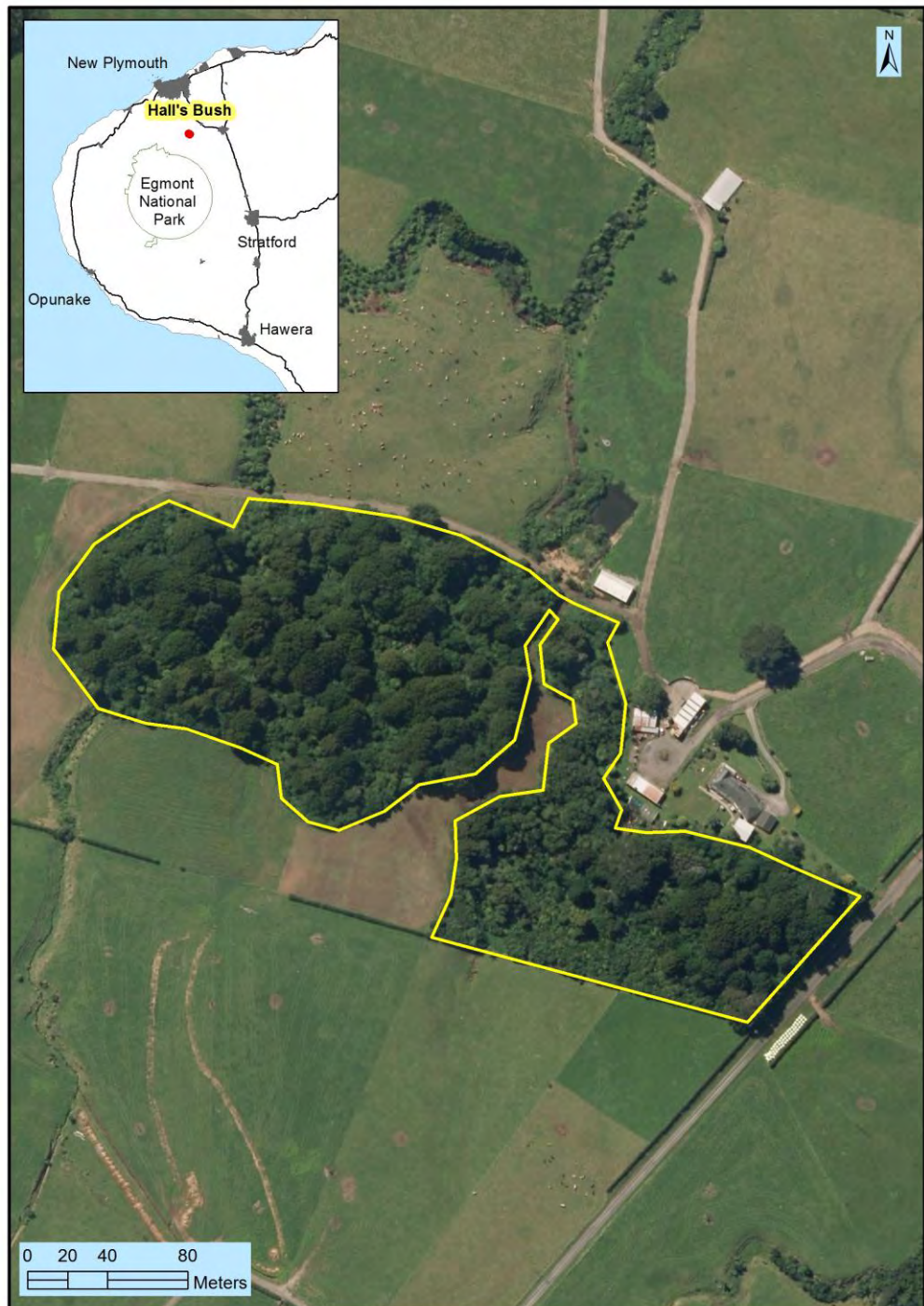
Native birds present include kereru, tui, grey warbler, fantail, silvereye, kingfisher and pukeko. A small stream is present and is likely to contain notable freshwater fish such as kokopu and longfin eels. There is very good habitat for a range of other notable native species including reptiles and invertebrates.

Ecological Values

Ecological Context - Medium	Enhances connectivity between fragmented indigenous habitats in this area including nearby riparian habitats and more distant Korito Heights and the Alfred Road Wetland.
Rarity and Distinctiveness - Medium	Contains the 'Regionally Distinctive' swamp maire and likely to contain other notable species including notable native fish and reptiles.
Representativeness - High	Contains vegetation on 'Acutely Threatened' land environment (F5.2a) and is a remnant of an ecosystem type (MF7-2: Rata, Tawa, Kamahi, podocarp forest) considered 'Less Reduced'.
Sustainability - Positive	In good vegetative condition and likely to remain resilient to existing or potential threats.

Other Management Issues

Habitat Modification - Medium	Currently fenced and in good condition. Potential risk from stock breach and human modification.
Herbivores - Medium	Currently low although potential threat from cattle if fences were breached or canopy browse if possum numbers became high.
Possum Self-help	The site lies in the possum self-help area and receives possum control as part of the program.
Predators - Medium	Predators including rodents, mustelids, possums, feral cats and hedgehogs will be having an impact on native species at the site.
Weeds - High	Localised infestations of weeds such as tradescantia, barberry and blackberry are present as at the site.



Chris Jury Forest and Wetlands

At a glance

TRC Reference: BD/9605	LENZ:	F5.2b Acutely threatened
Ecological District: Egmont	National:	Priority 1 – Threatened Land Environment
Land Tenure: Private		Priority 4 – Threatened Species
Area(ha): 3.4	Regional:	Key Native Ecosystem
GPS: 1712892X & 5678107Y	Regional Ecosystem Loss:	Chronically threatened 10-20% left
Habitat: Forest Remnant/Wetland	Catchment:	Waiau (397)
Bioclimatic Zone: Semi-Coastal		
Ecosystem Type: WF13: Tawa, kohekohe, rewarewa, hinau, podocarp forest		

General Description

The Chris Jury Forest and Wetlands site is located on private land off Otaraoa Road, 6 km south-east of Waitara. The site lies in the Egmont Ecological District and Waiau stream catchment. The area is comprised of a small (1.1ha) semi-coastal forest remnant on the Waiau stream margin and approximately 2.3ha of manmade wetlands with established buffer vegetation. The forest remnant is in good condition with a dense mixed canopy and understory and the wetlands are well established and also in good condition. Notable species present include the 'Regionally Distinctive' swamp maire and 'At Risk' giant kokopu and longfin eel.

Ecological Features

Flora

The forest remnant canopy is dominated by tawa and pukatea with occasional titoki, rewarewa, white maire, pigeonwood and mahoe. Puriri and kohekohe are also present although are mainly younger trees or saplings. Notably, a small stand of swamp maire is present on a wet southern margin of the forest. The understory is dominated by kawakawa and coprosma with a mix of other species present including pigeonwood, mahoe and tree ferns. Ground cover, climbers and epiphytes are common. Other notable flora species may be present including Tawhirikaro.

Fauna

Native birds present include kereru, tui, bellbird, shining cuckoo, grey warbler, fantail, kingfisher and morepork. The Waiau stream on the forest margin contains freshwater crayfish, giant kokopu and longfin eels and may contain other notable freshwater fish such as banded kokopu. There is very good habitat for a range of other notable native species including reptiles and invertebrates.

Ecological Values

Ecological context - High	Enhances connectivity between fragmented indigenous habitats in this area including Bushy Park and Tikorangi Whiteheads KNE.
Rarity and Distinctiveness - Medium	Contains the 'Regionally Distinctive' swamp maire and 'At Risk' giant kokopu and longfin eel. Provides habitat for and likely to contain other notable species including reptiles and other notable native fish.
Representativeness - High	Contains vegetation on 'Acutely Threatened' land environment (F5.2b) and is a remnant of an ecosystem type (WF13: Tawa, kohekohe, rewarewa, hinau, podocarp forest) considered 'Chronically Threatened' as less than 20% remains in the region.

Sustainability - Positive

In very good vegetative condition and likely to remain resilient to existing or potential threats.

Other Management Issues

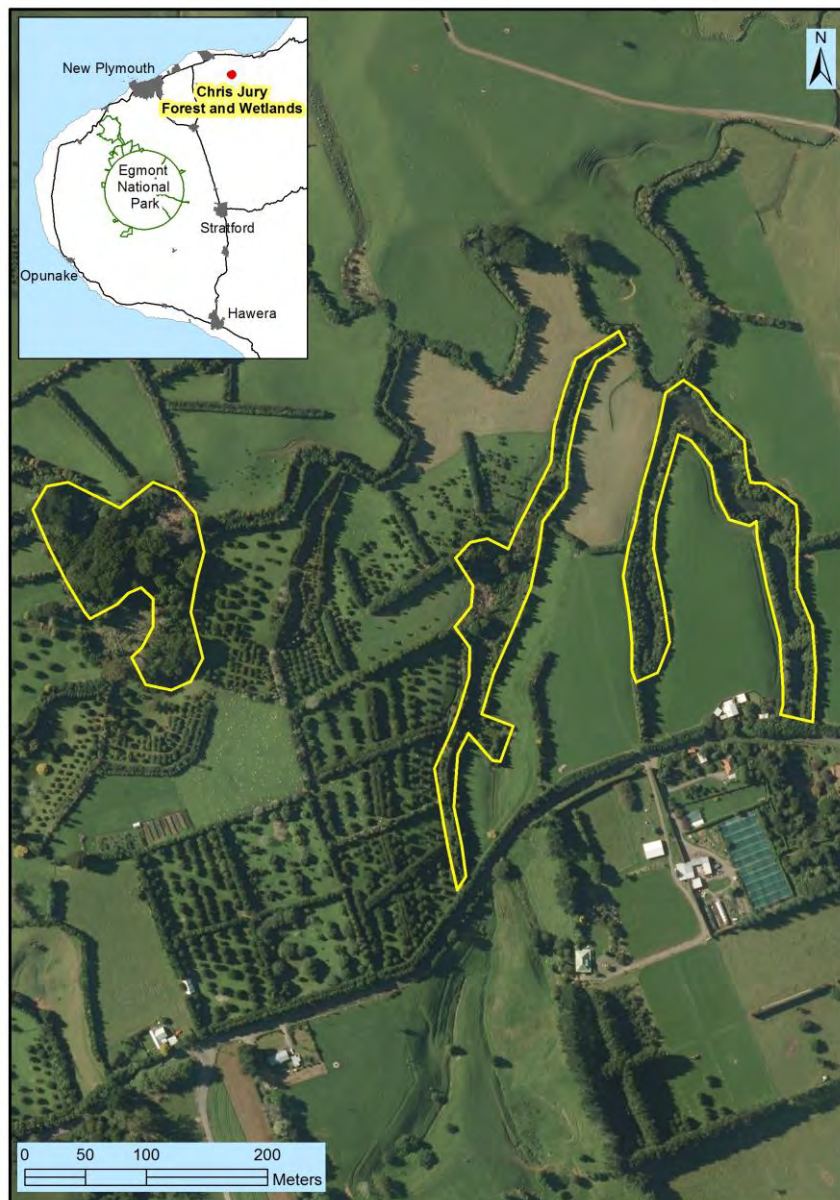
Habitat Modification - Medium Currently mostly fenced and in good condition apart from an area on the south stream margin. Potential medium risk from stock breach and human modification.

Herbivores - Medium Potential threat from cattle if fences were breached.

Predators - Medium Predators including rodents, mustelids, possums, feral cats and hedgehogs will be having an impact on native species at the site.

Weeds - High The landowner has undertaken a sustained weed control program and weed threats are currently low. Potential weed threats will be high and will be an ongoing risk at this site.

Possum Self-help The site is outside the current possum self-help program boundary although receives occasional possum control by the landowners. High possum numbers have the potential to impact on forest health.



David & Raewyn Lusk

At a glance

TRC Reference: BD/9603	LENZ:	F5.2a Acutely threatened
Ecological District: Egmont	National:	Priority 1 – Threatened Land Environment
Land Tenure: Private	Regional:	Potential KNE
Area(ha): 1	Regional Ecosystem Loss:	Chronically threatened 10-20% left
GPS: 1692480X & 5670785Y	Protection Status:	QEII Covenant
Habitat: Forest Remnant	Catchment:	Huatoki (389)
Bioclimatic Zone: Semi-Coastal		
Ecosystem Type: WF13: Tawa, kohekohe, rewarewa, hinau, podocarp forest		

General Description

The site is located on the south west fringe of New Plymouth in the Egmont Ecological District and Huatoki Stream catchment. The site is comprised of an east facing slope 1 ha in size. The edges of the remnant are regenerating native forest and tree ferns. The main slope is mainly a remnant of cutover old forest with a good canopy cover and undergrowth. The site provides good connectivity to other Key Native Ecosystems in the area including the Huatoki Scenic Reserve, McQuoid QII, McGlashan Bush and the Ratapihipihi Scenic Reserve.

Ecological Features

Flora

The main canopy of the old forest area is dominated by puriri, pukatea, tawa, rimu and rewarewa. The lower canopy is dominated by mahoe, pigeonwood and tree ferns. A good mix of seedlings and saplings are present including kawakawa, mapou, pigeonwood and coprosmas. A variety of native ferns dominate the groundcover including the notable *Deparia petersenii* subsp. *congrua* which is listed as 'Regionally Distinctive'. The area is classified as an 'Acutely Threatened' land environment (F5.2b). Native vegetation in these areas is rare and important for species threatened by habitat loss.

Fauna

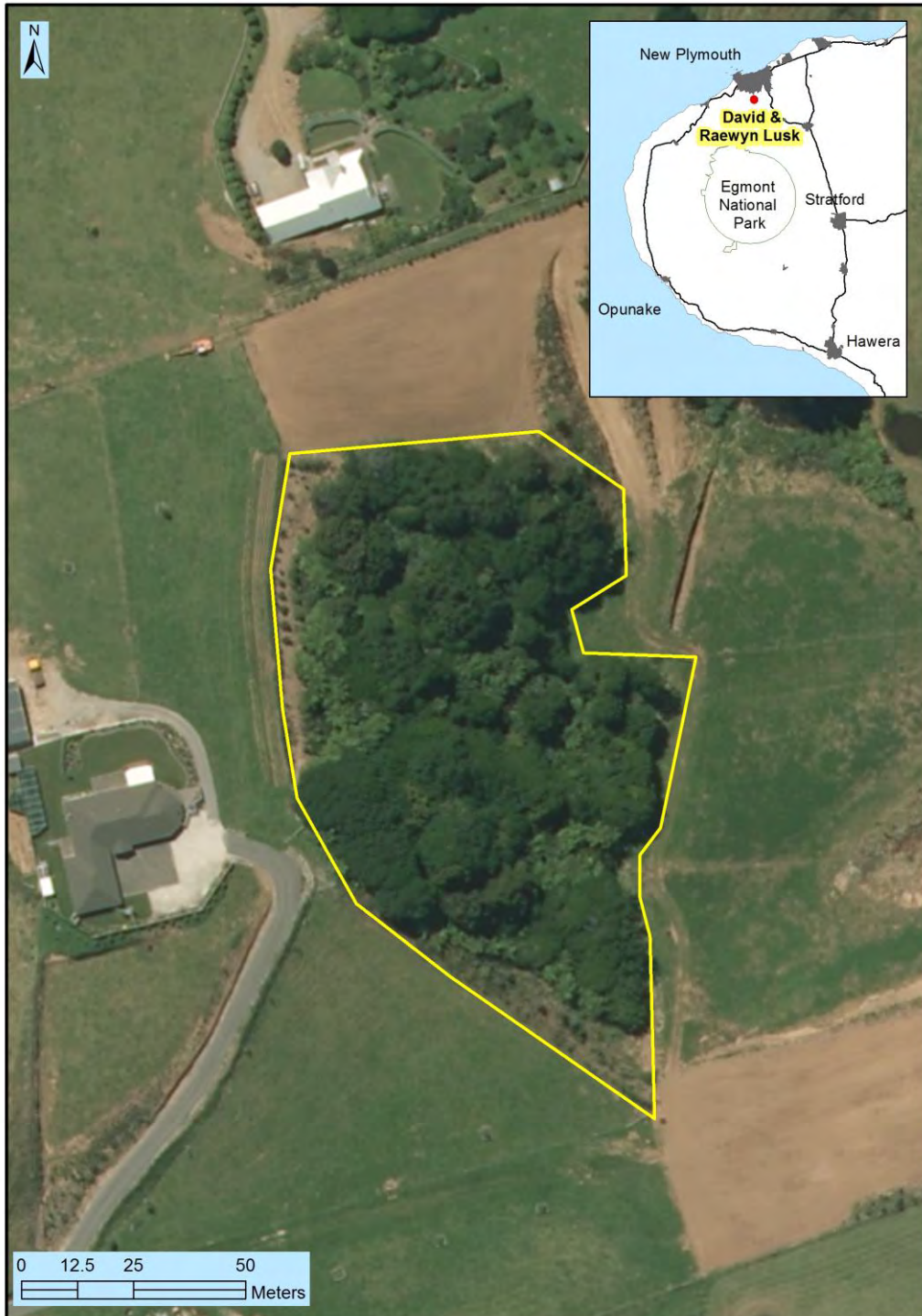
The site provides a small forest habitat for native birds such as tui, kereru, fantail, grey warbler, shining cuckoo and morepork. Good habitat exists for native reptiles and invertebrates which will include notable species.

Ecological Values

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.
Ecological context - High	The site provides good connectivity to other Key Native Ecosystems in the area including the Huatoki Scenic Reserve, McQuoid QII, Omata Bush, McGlashan Bush and the Ratapihipihi Scenic Reserve.
Representativeness - High	Contains indigenous vegetation on 'Acutely Threatened' (F5.2a) LENZ land environment.
Rarity and Distinctiveness - Medium	Contains the 'Regionally Distinctive' fern <i>Deparia petersenii</i> subsp. <i>congrua</i> .

Other Management Issues

Weeds - Medium	Woolly nightshade is the main pest plant issue at the site. There is also a small patch of tradescantia.
Predators - Medium	Rodents, mustelids, possums, cats and hedgehogs will be impacting on fauna values at the site.
Habitat Modification - Low	The site is in the process of being legally protected with a QEII covenant.
Herbivores - Medium	Fence upgrades on the northern side of the site are needed to ensure that stock are excluded from the site.



Low East Block

At a glance

TRC Reference: BD/9616	LENZ:	F1.1d Not threatened
Ecological District: Matemateaonga	National:	Priority 4 - Threatened Species
Land Tenure: Private	Regional:	Key Native Ecosystem
Area(ha): 5.4		Representative ecosystem type
GPS: 1733739X & 5656751Y	Regional Ecosystem Loss:	Less reduced >50% left
Habitat: Forest Remnant	Protection Status:	Memorandum of Encumbrance
Bioclimatic Zone: Lowland	Catchment:	Patea (343) Waitara (395)
Ecosystem Type: MF7.2: Rata, tawa, kamahi, podocarp forest		

General Description

The Low East forest remnant is privately owned land and is located near Kioere approximately 25kms north east of Stratford in central Taranaki. The 5.4ha forest remnant lies in the Matemateaonga Ecological District and Patea River catchment. The forest is situated on a hill top and hill slopes and is generally south and west facing. The forest canopy is dominated by tawa with occasional pukatea, miro and rimu. The forest is attached to a wider area of forest on the adjacent property and is considered a priority area for management in Taranaki.

Ecological Features

Flora

The forest canopy is dominated by tawa with occasional pukatea, miro, rimu, titoki and rewarewa. The understory is sparse in places and is dominated by pigeonwood, mahoe, coprosma and tree ferns. Ground cover is sparse in places and climbers and epiphytes are fairly common.

Fauna

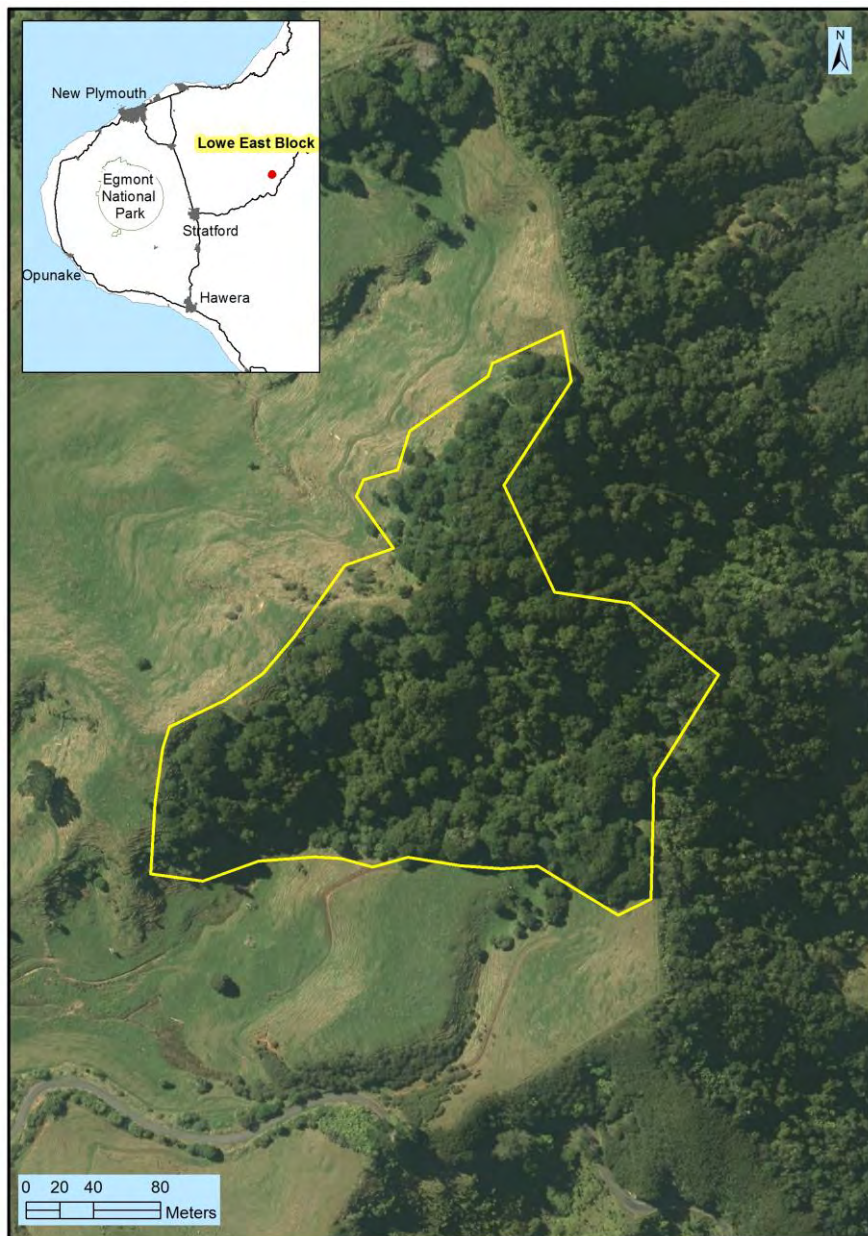
Native birds present include North Island robin, kereru, tui, bellbird, silvereye, grey warbler, fantail, tomtit, kingfisher and morepork. The presence of the 'Threatened' long-tailed bat is notable for the site. A very small stream in the forest and a small man made pond is present on the buffer which may contain longfin eels and freshwater crayfish. There is very good habitat for a range of other notable native species including reptiles and invertebrates.

Ecological Values

Ecological context - High	Enhances connectivity between fragmented indigenous habitats in this area including nearby remnants on this property and nearby KNE's such as the Te Wera wetlands. Close to priority brown kiwi management areas.
Rarity and Distinctiveness - Medium	Contains the 'Threatened' long-tailed bat and 'At Risk' North Island robin. Provides habitat for and likely to contain other notable species including reptiles and invertebrates.
Representativeness - High	A remnant of a native forest ecosystem (MF7.2: Rata, tawa, kamahi, podocarp forest) that has been identified as a priority representative area for management in Taranaki (Top 30% Representative Ecosystem type).
Sustainability - Positive	In relatively good vegetative condition and likely to continue to improve especially if goats were held at reduced levels.

Other Management Issues

Habitat Modification - Low	The habitat is vulnerable to modification although there are no immediate threats.
Herbivores - High	Stock and occasional feral goats have had an impact on areas of the forest understory and ground cover although the site has some recovery since stock have been excluded. Goats and possums remain a high threat.
Predators - Medium	Predators including rodents, mustelids, possums, feral cats and hedgehogs will be having an impact on native species at the site.
Weeds - Low	Currently a low threat at this site with occasional burdock and pasture weed species.
Possum Self-help	The site is outside the current possum self-help program boundary although receives occasional possum control by the landowner. High possum numbers have the potential to impact on forest health.



Low North Block

At a glance

TRC Reference: BD/9617	National:	Priority 4 – Threatened Species
Ecological District: North Taranaki	Regional:	Close proximity to a representative ecosystem site
Land Tenure: Private		Key Native Ecosystem
Area(ha): 12.2	Regional Ecosystem Loss:	Less reduced >50% left
GPS: 1732796X & 5657824Y	Catchment:	Waitara (395)
Habitat: Forest Remnant		
Bioclimatic Zone: Lowland		
Ecosystem Type: MF7.2: Rata, tawa, kamahi, podocarp forest MF7.3: Tawa, pukatea, podocarp forest		

General Description

The Low North forest remnant is privately owned land and is located near Kiore approximately 25kms north east of Stratford in central Taranaki. The 12.2ha forest remnant lies in the North Taranaki Ecological District and Waitara River catchment. The forest is situated on the upper slopes of a north west facing valley leading down to the Matau Road. The forest canopy is dominated by tawa with occasional pukatea, miro and rimu. The forest is attached to a wider area of forest on the adjacent property and is nearby to a site considered as a priority area for management.

Ecological Features

Flora

The forest canopy is dominated by tawa with occasional pukatea, miro, rimu, titoki and rewarewa. The understory is sparse in places and is dominated by pigeonwood, mahoe, coprosma and tree ferns. Ground cover is sparse in places and climbers and epiphytes are fairly common.

Fauna

Notable native birds present include the 'Threatened' North Island brown kiwi and 'At Risk' North Island robin and whitehead. Other native birds present include kereru, tui, bellbird, silvereeye, grey warbler, fantail, tomtit, kingfisher and morepork. Also notable is the presence of the 'Threatened' long-tailed bat. There is very good habitat for a range of other notable native species including reptiles and invertebrates.

Ecological Values

Ecological context - High	Enhances connectivity between fragmented indigenous habitats in this area including nearby remnants on this property and nearby KNE's such as the Te Wera wetlands. Close to priority brown kiwi management areas.
Rarity and Distinctiveness - High	Contains notable species such as the 'Threatened' North Island brown kiwi and long-tailed bat. Also contains the 'At Risk' North Island robin and whitehead. Provides habitat for and also likely to contain other notable species including reptiles and invertebrates.
Representativeness - Medium	Similar to and close to a remnant of a native forest ecosystem (MF7.2: Rata, tawa, kamahi, podocarp forest) that has been identified as a priority representative area for management in Taranaki (Top 30% Representative Ecosystem type).

Sustainability - Positive

In relatively good vegetative condition and likely to continue to improve when fenced and especially if goats were held at reduced levels.

Other Management Issues

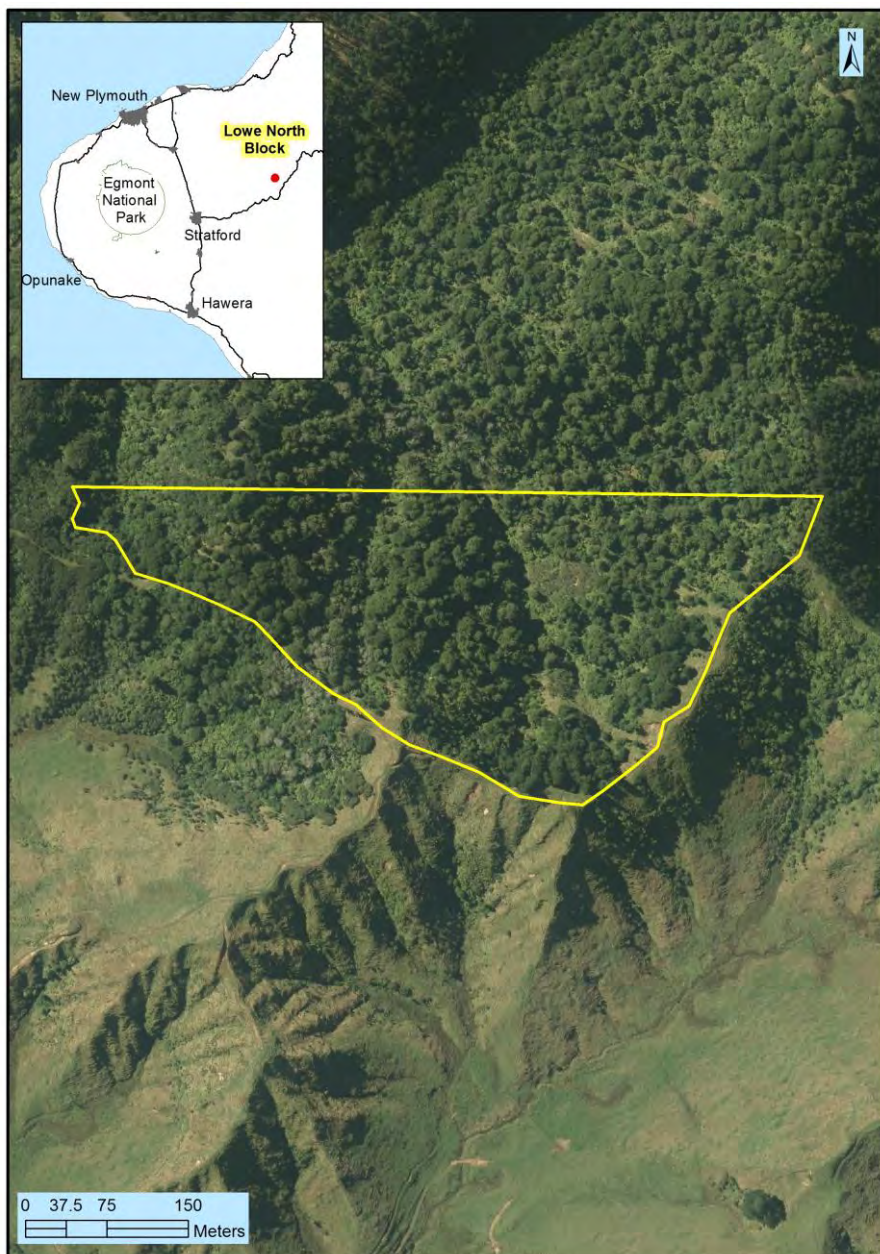
Habitat Modification - Low The habitat is vulnerable to modification although there are no immediate threats.

Herbivores - High Stock and occasional feral goats have had an impact on areas of the forest understory and ground cover typical in this area. Goats and possums will remain a high threat.

Predators - Medium Predators including rodents, mustelids, possums, feral cats and hedgehogs will be having an impact on native species at the site.

Weeds - Low Currently a low threat at this site with occasional pasture weed species.

Possum Self-help The site is outside the current possum self-help program boundary although receives occasional possum control by the landowner. High possum numbers have the potential to impact on forest health.



Paritutu Centennial Park

At a glance

TRC Reference: BD/9624	LENZ:	D2.1b Chronically threatened
Ecological District: Egmont	National:	Priority 1 – Threatened Land Environment
Land Tenure: District		Priority 4 – Threatened Species
Area(ha): 14.8		Priority 2 – Sand Dunes and Wetlands
GPS: 1688530X & 5676028Y		
Habitat: Coastal/Forest Remnant	Regional:	Representative ecosystem type Potential KNE
Bioclimatic Zone: Coastal	Regional	Acutely Threatened <10% left
Ecosystem Type: CL6: Hebe, wharariki flaxland/ rockland	Ecosystem Loss:	At risk 20-30% left
WF13: Tawa, kohekohe, rewarewa, hinau, podocarp forest	Protection Status:	Local Government
WF5: Tōtara, kānuka, broadleaved forest[Dune forest]	Catchment:	Herekawe (388)

General Description

Paritutu Centennial Park runs from Paritutu rock in the north to the Herekawe stream in the south. Paritutu is the tallest part of the rim of an old volcano and has been damaged in the past by attempts to quarry rock for the construction of the nearby port. Vegetation at the site is a mix of remnant coastal forest and scrub which has been heavily modified in the past. Re-vegetation plantings have been carried out and have introduced some non-local native species which have naturalised in the area including puka (*Meryta sinclairii*) and coastal mahoe (*Melicytus novae-zelandiae*). A distinct form of *Corokia cotoneaster* is found on the slopes of Paritutu and is known as “Paritutu korokio”. Goldstripe gecko are found at the site and individuals from other areas have been released near the base of Paritutu in the past. The area provides important connectivity to the Nga Motu / Sugar Loaf Islands which are home to threatened plants, NZ fur seal and significant seabird colonies.

Ecological Features

Flora

Vegetation at the site is a mix of remnant coastal forest and scrub which has been heavily modified in the past. The main canopy of the coastal forest is now dominated by non-local native coastal tree species karo, pohutakawa and puka (*Meryta sinclairii*). A distinct form of *Corokia cotoneaster* is found on the slopes of Paritutu and is known as “Paritutu korokio”. The original ecosystem types are assumed to be a mix of hebe/wharariki scrub, tawa, kohekohe forest and totara, kanuka, dune forest.

Fauna

Birds present are typical of the outskirts of urban New Plymouth with a large proportion of exotic species. There are a range of seabirds that nest on the nearby Nga Motu / Sugar Loaf Islands including red billed gulls, diving petrels, grey faced petrels and fluttering shearwaters. It is likely that these species will be prospecting for nearby breeding grounds on the mainland and with sufficient predator control new seabird colonies could establish at this site. Little penguin and New Zealand fur seal currently already use the area. Goldstripe gecko are present at the site and individuals from other areas have been released here in the past. Copper skinks are also present.

Ecological Values

Rarity and Distinctiveness - Medium	Contains core habitat for the 'at risk' little penguin and the 'at risk' goldstripe gecko. The site also has a significant population of a distinct form of <i>Corokia cotoneaster</i> known as 'Paritutu korokio'.
Ecological context - High	Provides additional habitat and significant connectivity with the Nga Motu / Sugar Loaf Islands and other Key Native Ecosystems in this area such as Tank Farm Ponds, Barrett Lake Scenic Reserve and Omata Bush KNEs.
Representativeness - High	Contains indigenous vegetation on land classified as a Chronically Threatened (D2.1b) LENZ environment. Also contains an area that has been identified as a priority representative area for management in Taranaki (Top 30% Representative Ecosystem sites).
Sustainability - Positive	Key ecological processes still influence the site and with appropriate management, it can remain resilient to existing or potential threats.

Other Management Issues

Predators - High	Possums, cats, mustelids, hedgehogs and rodents
Weeds - High	Boneseed, Pampas, gorse, boxthorn, wilding pines, agapanthus, woolly nightshade and kahili ginger.
Habitat Modification - Low	The site is protected as a NPDC reserve, Vulnerable to erosion from the sea.



Pirinoa

At a glance

TRC Reference: BD/9615	LENZ:	C1.1a Chronically threatened
Ecological District: Egmont		F5.2a Acutely threatened
Land Tenure: Private	National:	Priority 1 – Threatened Land Environment
Area(ha): 1.3	Regional:	Key Native Ecosystem
GPS: 1710821X & 5660523Y		Close to a representative ecosystem type
Habitat: Forest Remnant	Regional Ecosystem Loss:	Acutely Threatened <10% left
Bioclimatic Zone: Lowland		Chronically threatened 10-20% left
Ecosystem Type: MF7.3: Tawa, pukatea, podocarp forest	Protection Status:	QEII Covenant
WF8: Kahikatea, pukatea forest	Catchment:	Waitara (395)

General Description

The Pirinoa site is located on privately owned land 7.5 km south east of Inglewood and lies in the Egmont Ecological District and Waitara River catchment. The Pirinoa site comprises a small (1.3 ha) QEII covenanted area of lowland tawa and swamp forest located close to the Manganui River off Ngaro Road. The remnant is loosely connected to other riparian vegetation along the Manganui River and provides greater connectivity to other priority sites in the area such as Tariki Bush, Maketawa Stream Forests and Dravitzki QEII covenants on Salisbury Road.

Ecological Features

Flora

The high canopy at Pirinoa is dominated by tawa with occasional kahikatea, rimu and miro. The understory is intact and includes species such as kanono, pigeonwood, mahoe and turepo. Native ferns are well established and include shining spleenwort, sickle spleenwort, hen and chicken fern etc. Green mistletoe (Pirinoa) and swamp maire (both Regionally Distinctive) are present and are notable for this site.

Fauna

Birds are generally in moderate to low numbers in the area and include kereru, tui, bellbird, fantail, grey warbler, silvereye and morepork. A range of exotic species are also present. Good habitat exists for native reptiles including dense vegetation, epiphytes, loose bark, leaf litter, logs and ground cover. Native notable reptile species may be present such as the goldstripe gecko, forest gecko, striped skink and ornate skink. The habitat will contain a very diverse range of terrestrial invertebrates likely including notable species such as peripatus. A small stream is present which may contain notable native fish species such as banded kokopu.

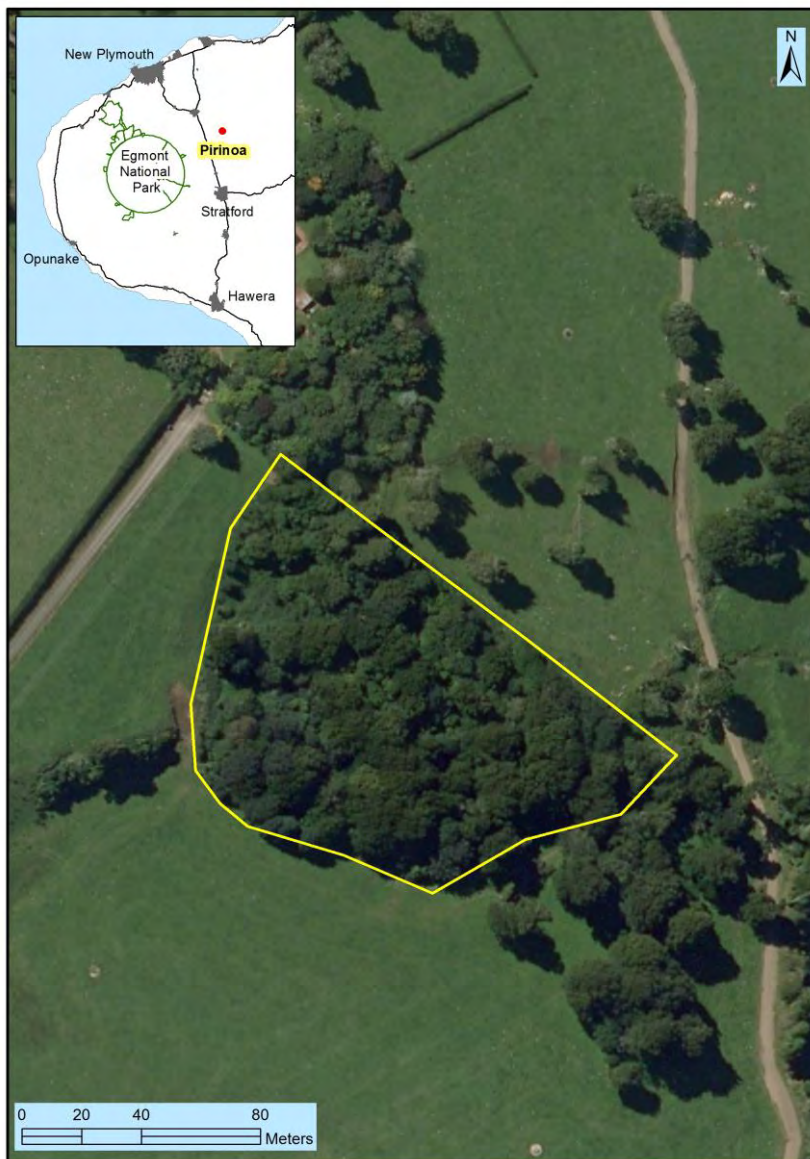
Ecological Values

Ecological Context - Medium	Provides greater connectivity to other priority sites in the area such as Tariki Bush, Maketawa Stream Forests and Dravitzki QEII covenants on Salisbury Road.
Rarity and Distinctiveness - Low	Contains the 'Regionally Distinctive' green mistletoe and swamp maire and likely to contain other notable species.

Representativeness - High	Contains indigenous vegetation on F5.2a ('Acutely Threatened') and C1.1a ('Chronically Threatened') LENZ environments. The forest type is also particularly rare in Taranaki with less than 10% of this type of forest remaining in the region. Close to a representative ecosystem type.
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 Management Issues

Habitat Modification - Low	Currently fenced and in good condition Potential risk from stock breach and human modification.
Herbivores - High	Currently low although potential threat from cattle if fences were breached or canopy browse if possum numbers became high.
Possum Self-help	The site lies in the possum self-help area and receives possum control as part of the program.
Predators - Medium	Predators including rodents, mustelids, possums, feral cats and hedgehogs will be having an impact on native species at the site.
Weeds - Medium	Sycamore and tradescantia can have long-tern impacts on small forest remnants and are present at this site.



Sextus Family Reserve 5/06/376

At a glance

TRC Reference: BD/9580	LENZ:	F7.2a At risk
Ecological District: Egmont	National:	Priority 2 – Sand Dunes and Wetlands
Land Tenure: Private	Regional:	Potential KNE
Area(ha): 2.2		Close proximity to a representative ecosystem site
GPS: 1717553X & 5642891Y	Regional Ecosystem Loss:	At risk 20-30% left
Habitat: Forest Remnant/Wetland	Protection Status:	QEII Covenant
Bioclimatic Zone: Lowland	Catchment:	Patea (343)
Ecosystem Type: MF7.3: Tawa, pukatea, podocarp forest		

General Description

The Sextus Family Reserve forest remnant is privately owned land and is located approximately 7kms east of Stratford in central Taranaki. The 2ha forest remnant lies in the Egmont Ecological District and Patea River catchment. The forest is situated on a river terrace and old oxbow on the side of the Patea river with steep slopes leading up to flat dairy paddocks. The forest canopy is dominated by kahikatea with mahoe, totara and pigeonwood present. The forest is located 500m from and on the same property as Toko wetland KNE, providing habitat and connectivity for native biodiversity.

Ecological Features

Flora

The old forest area of the forest canopy is dominated by kahikatea. The understory is recovering and includes kawakawa, kanono, pigeonwood, mahoe, totara and tree ferns. Native ferns are well established and dominate the ground cover. Rank grass dominates the groundcover in the open areas on the stream boundary where natives including lemonwood have been planted.

Fauna

A moderate number of native birds were observed including kereru, grey warbler, silver eye, kingfisher and fantail. Good habitat exists for mudfish and the site is connected by waterways to known mudfish locations. Good habitat exists for native reptiles including dense vegetation, epiphytes, loose bark, leaf litter, logs and ground cover. A cave weta was found under a rotting log and the habitat will contain a diverse range of terrestrial invertebrates.

Ecological Values

Ecological context - High	The bush remnant provides important connectivity in a highly fragmented landscape to nearby priority biodiversity sites (500m south east from the Toko Wetland KNE and within a 4kms radius of 3 other QEII sites).
Rarity and Distinctiveness - Medium	Contains good habitat for notable priority species such as the Regionally Distinctive swamp maire and native reptiles and invertebrates.
Representativeness - Medium	Contains vegetation on 'At Risk' LENZ environment (F7.2a) and is a remnant of a regionally At Risk ecosystem type (MF7.3 Tawa, kahikatea, podocarp forest).

Sustainability - Positive

In relatively good vegetative condition. Key ecological processes still influence the site. Under appropriate management it can remain resilient to existing or potential threats.

Other Management Issues

Habitat Modification - Medium

Drains on south and eastern boundaries

Herbivores - Medium

Stock fencing in place. There is a history of occasional goat and deer grazing in the remnant as they move along the river boundary.

Possum Self-help

The forest remnant is within the self help possum control area and receives control in the form of phil proof bait stations serviced with brodifacoum.

Predators - Medium

Predators including rodents, mustelids, possums, feral cats and hedgehogs will be having an impact on native species at the site.

Weeds - High

Large coverage of old mans beard in parts of the canopy and expanding. Tradescantia is present on the forest floor in some places.



SWANEPOEL KNE

At a glance

TRC Reference: BD/9622	LENZ:	F5.2b Acutely threatened
Ecological District: Egmont	National:	Priority 1 – Threatened Land Environment
Land Tenure: Private	Regional:	Potential KNE
Area(ha): 2.45	Regional Ecosystem Loss:	Chronically threatened 10-20% left
GPS: 1704796X & 5679337Y	Catchment:	Waiongana (394)
Habitat: Forest Remnant		
Bioclimatic Zone: Semi-Coastal		
Ecosystem Type: WF13: Tawa, kohekohe, rewarewa, hinau, podocarp forest		

General Description

The Swanepoel forest remnant is privately owned land and is located near Waitara approximately 4kms east of Bell Bock in north Taranaki. The 2.45ha forest remnant lies in the Egmont Ecological District and Waiongana River catchment. The forest is situated on flat terrain in an area which has undergone drainage. The forest canopy is dominated by puriri with occasional pukatea, rimu and mahoe. The forest provides habitat and connectivity in an area where such remnants are not common.

Ecological Features

Flora

The forest canopy is dominated by puriri, with pukatea, pigeonwood and kohekohe present. The understory is recovering well and includes kawakawa, karaka, tawa, rimu, mahoe and mapou. Native ferns are well established with jointed fern abundant. Tradescantia dominates the groundcover in open areas including a large area where giant reed has been eradicated.

Fauna

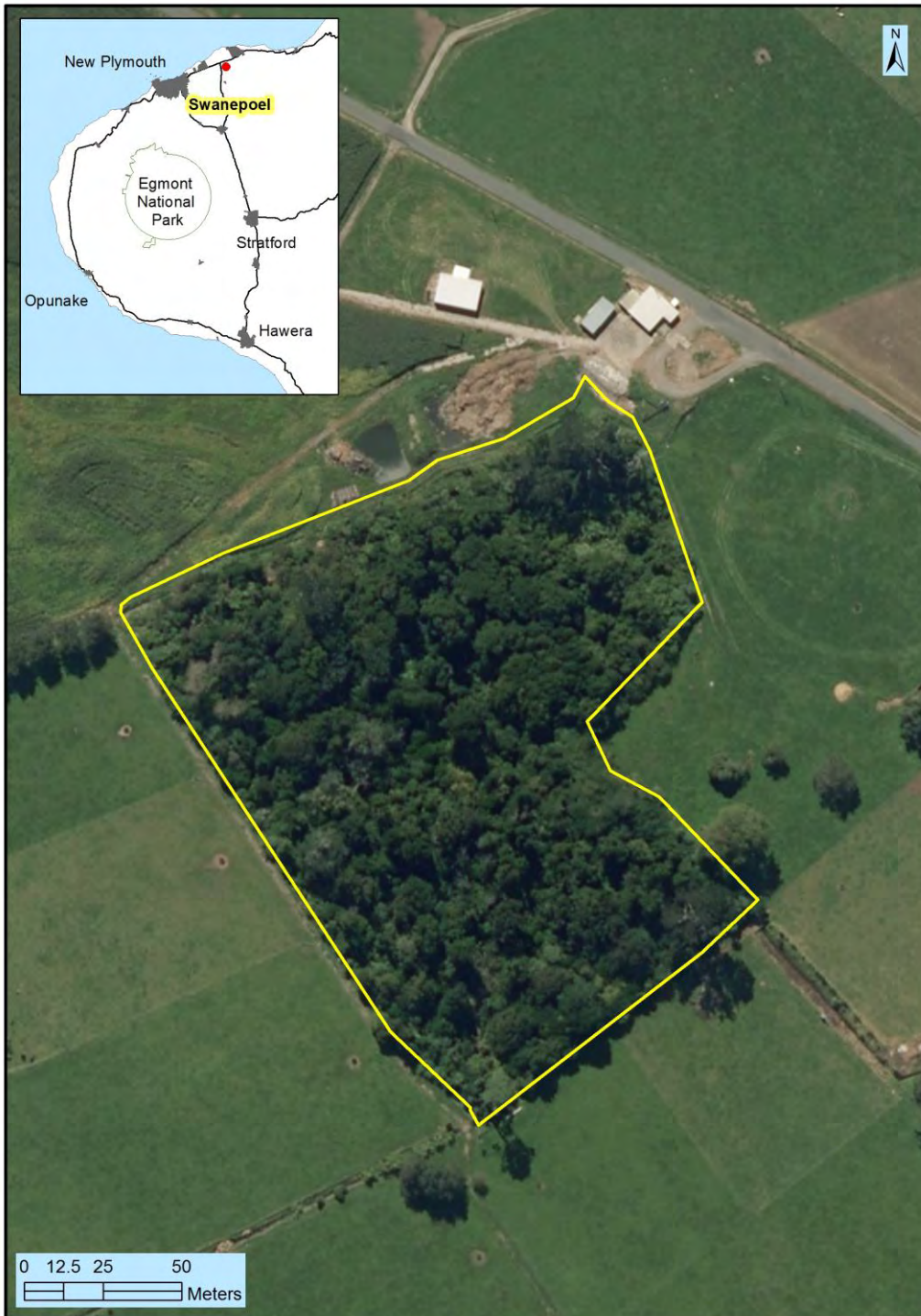
A moderate number of native birds were observed including fantail, tui, grey warbler and kingfisher. Good habitat exists for native reptiles including dense vegetation, epiphytes, loose bark, leaf litter, logs and ground cover.

Ecological Values

Ecological Context - Medium	Although the site is just over 2 ha it provides native habitat in a area where such fragments are lacking.
Rarity and Distinctiveness - Medium	Contains good habitat for notable priority species such as native reptiles and invertebrates.
Sustainability - Positive	Although there are several weed species with extensive coverage on the southern boundary, the northern side of the remnant remains in relatively good vegetative condition. The interior contains Tradescantia, however, overall the site has good potential to remain resilient to existing or potential threats under appropriate management.
Representativeness - High	Contains vegetation on an 'Acutely Threatened' LENZ environment (F5.2b) and is a remnant of a Chronically Threatened ecosystem type (WF13) that is now very rare in Taranaki.

Other Management Issues

Habitat Modification - Medium	Drains on boundary have drained this former wetland
Herbivores - Low	Stock proof, low amount of possum sign
Possium Self-help	Within possum self help area
Predators - Medium	Predators including rodents, mustelids, possums, feral cats and hedgehogs will be having an impact on native species at the site.
Weeds - High	Tradescantia common in interior, large grape vine and elaeagnus present in eastern boundary



The Totaras

At a glance

TRC Reference: BD/9613	LENZ:	F1.1b Not threatened
Ecological District: Matemateaonga	National:	Priority 4 – Threatened Species
Land Tenure: Private	Regional:	Potential KNE
Area(ha): 401		Close proximity to a representative ecosystem site
GPS: 1724236X & 5632198Y	Regional Ecosystem Loss:	At risk 20-30% left
Habitat: Forest Remnant	Catchment:	Tangahoe (348)
Bioclimatic Zone: Lowland		
Ecosystem Type: MF7.3: Tawa, pukatea, podocarp forest		

General Description

The Totaras KNE is located approximately 12 km east of Eltham and lies in the Tangahoe stream catchment and Matemateaonga Ecological District. The Totaras area is of large size (401ha) and is mainly made up of regenerating native forest species with a dominant canopy of tree ferns and low stature natives with emerging larger trees becoming more evident. The Totaras site is less than 500 meters from the iconic Lake Rotokare Scenic Reserve fenced sanctuary and provides spill over habitat from the sanctuary and good connectivity to other indigenous habitats in this area.

Ecological Features

Flora

The vegetation of the site is regenerating native bush with a canopy dominated by tree ferns, mahoe, rangiora, lancewood and manuka. In some areas a more mature canopy is establishing and is comprised of tawa, rewarewa, miro, kamahi, totara and rimu. In the wetter areas kahikatea and pukatea are more common. The regenerating canopy has a high proportion of native vines climbing over it with NZ passionfruit, NZ jasmine, bush lawyer and supplejack. The understory is comprised of a range of ferns and shrub species including kanono and coprosma rhamnoides.

Fauna

The site has a wide range of native birds which is very likely being bolstered by the overflow of birds spilling out over the fence from the Rotokare Scenic Reserve. North island brown kiwi are present in low numbers. NZ falcon have been recorded from the site along with North island robin, tui, bellbird, tomtit, kereru, grey warbler, silvereye and fantail. Good habitat exists for native reptiles including epiphytes, loose bark, abundant foliage, leaf litter and forest ground cover. The 'at risk' goldstripe gecko has been recorded at the nearby Rotokare Scenic Reserve and is likely present at this site also. Long tailed bats have been recorded at the site. The site will contain a diverse range of invertebrates which may include notable species such as peripatus. The site contains a number of tributaries to the Makino stream in the Tangahoe river catchment which will likely contain banded kokopu and longfin eels.

Ecological Values

Ecological context - High	Provides good connectivity and size to ecological restoration projects in this area.
Rarity and Distinctiveness - High	Contains and provides core habitat for the 'Threatened' North Island brown kiwi, New Zealand falcon and long-tailed bat. Provides additional core habitat for spill over of other notable species from the Lake Rotokare predator fenced reserve.

Representativeness - Medium

Contains indigenous vegetation in an area classed as 'Not Threatened' (F1.1b). The site is close to an area that has been identified as a priority representative area for management in Taranaki (Top 30% Representative Ecosystem type). The vegetation in the Totaras block is regenerating well and over time will revert to mature native forest once typical in that area.

Other Management Issues

Weeds - Low

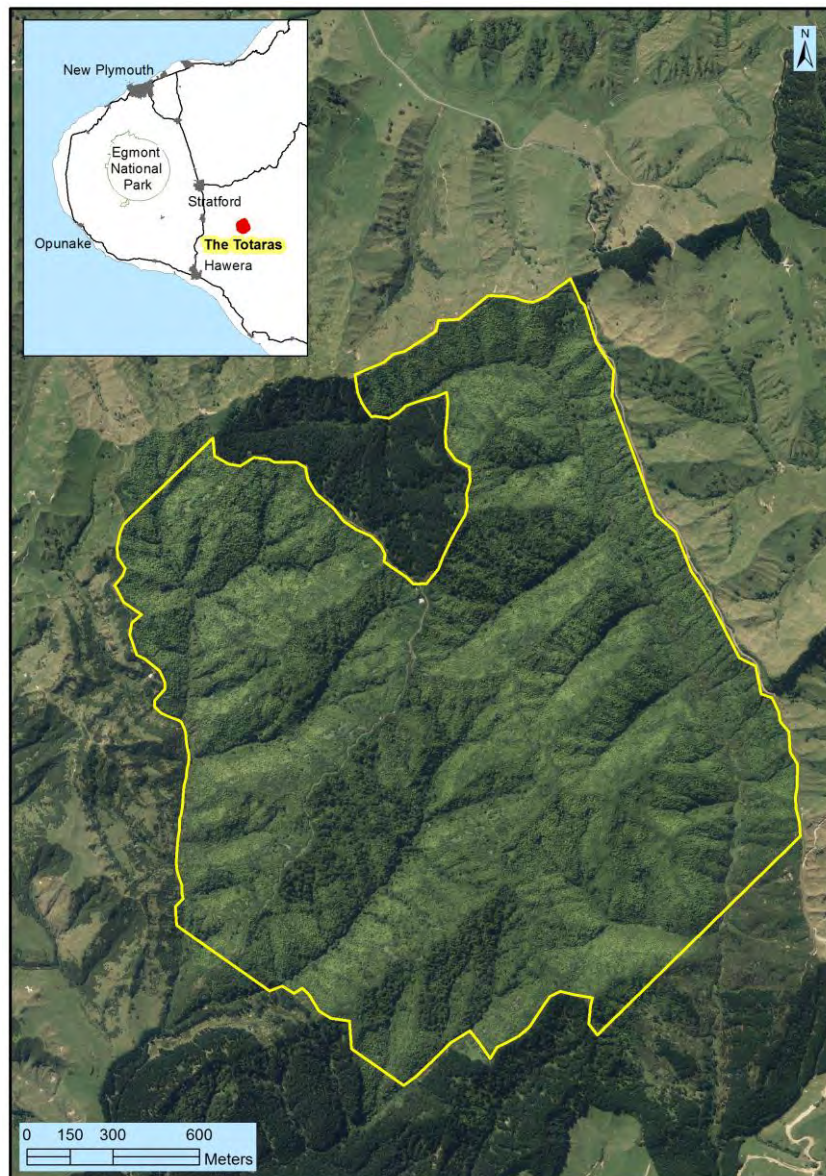
The site has few problem pest plants. Gorse and pampas are a problem encroaching onto access tracks.

Predators - High

Predators including rodents, mustelids, possums, feral cats and hedgehogs will be having an impact on native species at the site. Pest animal control at the site is coordinated by the South Taranaki branch of Forest and Bird. Current control is targeting mustelids, rats, feral cats and possums.

Habitat Modification - Low

The landowners are looking to legally protect the site by registering a QEII trust covenant on the site.



Todd Energy - Tikorangi Road East Farm

At a glance

TRC Reference: BD/9611	LENZ:	F5.2a Acutely threatened
Ecological District: Egmont		F5.2b Acutely threatened
Land Tenure: Private	National:	Priority 1 – Threatened Land Environment
Area(ha): 3.5	Regional:	Potential KNE
GPS: 1713011X & 5677293Y	Regional Ecosystem Loss:	Chronically threatened 10-20% left
Habitat: Forest Remnant	Catchment:	Waiau (397)
Bioclimatic Zone: Semi-Coastal		
Ecosystem Type: WF13: Tawa, kohekohe, rewarewa, hinau, podocarp forest		

General Description

The site is located on Tikorangi road east approximately 8km south east of Waitara and is comprised of five small forest remnants in the Waiau stream catchment totaling an area of 3.5 ha. The site is located in the Egmont ecological district. All the remnants are examples of lowland semi coastal forest with a canopy dominated by tawa, kohekohe, rewarewa, with some rimu and puriri. The site provides good connectivity to other Key Native Ecosystems in the area including the Bushy park, Tikorangi Whithead, and Mangahewa KNE's.

Ecological Features

Flora

The canopy of the site is dominated by tawa, kohekohe, rewarewa, with some rimu and puriri. The canopy is mainly intact and the understory is in reasonable condition where stock are excluded. Pukatea (*Laurelia novaezelandiae*) is a common canopy component in the poorly drained gullies. The 'at risk' King fern is present in areas that stock have been excluded from. The site also contains the 'regionally distinctive' fern *Deparia petersenii* subsp. *congrua*.

Fauna

Native birds found at the site include tui, kingfisher, grey warbler and fantail. Good habitat exists for native reptiles including epiphytes, loose bark, abundant foliage, leaf litter and forest ground cover. Good habitat for native freshwater fish exists in a tributary of the Waiau stream which runs through the site. Banded kokopu are likely present and a spotlight survey could be carried out to identify native fish values.

Ecological Values

Ecological Context - Medium	Provides additional habitat and greater connectivity with other Key Native Ecosystems in this area such as the Bushy Park, Mangahewa and Tikorangi Whitehead KNE's.
Representativeness - High	Contains indigenous vegetation type classified as an 'Acutely Threatened' (F5.2b) LENZ environment.
Rarity and Distinctiveness - Medium	The 'at risk' King fern is present in areas that stock have been excluded from. The site also contains the 'regionally distinctive' fern <i>Deparia petersenii</i> subsp. <i>congrua</i> .
Sustainability - Positive	Key ecological processes still influence the site. Under appropriate management, it can remain resilient to existing or potential threats.

Other Management Issues

Weeds - High	Woolly nightshade, wandering willy and banana passionfruit are having an impact on the condition of the remnants and control of these species would greatly benefit the remnants.
Predators - High	Invasive animal species such as possums, rats, feral cats and mustelids will be impacting the flora and fauna of the bush remnants.
Herbivores - High	Stock are getting through the fences at some of the remnants and upgrading the fences to a stock proof condition would greatly benefit the site.
Habitat Modification - Low	Todd energy are working with the QEII Trust to covenant the bush remnants.

