Cathie Native Bush

At a glance

TRC Reference: BD/9723 LENZ: F5.3b Not threatened Ecological District: Egmont Local: Significant Natural Area

Land Tenure: Private National: Priority 4 – Threatened Species

Area(ha): 4.2 Regional: Key Native Ecosystem

GPS: 1691859X & 5662656Y State of Environment Site

Regional Less reduced >50% left

Habitat: Forest Remnant Ecosystem Loss:

Protection Status: QEII Covenant

Bioclimatic Zone: Lowland

Catchment: Waiwhakaiho (392)

Ecosystem Type: MF7.2: Rata, tawa, kamahi,

podocarp forest

General Description

Cathie Native Bush KNE is a forest remnant situated on private land in the New Plymouth District, nine kilometers south of New Plymouth. The site borders the Mangorei stream and is located in the Egmont Ecological District. The remnant is protected by a QEII Covenant and is designated under the NPDC proposed District Plan as a Significant Natural Area. In total the site makes up 4.2 hectares of lowland forest, classified as ecosystem type MF7-2 'Rata, tawa, kamahi and podocarp forest'. The forest is in good condition with a dense mix of canopy and understory species. The site provides good connectivity as a stepping-stone habitat between other forest fragments and wetlands in the area.

Ecological Features

Flora

The canopy of the forest remnant is dominated by tawa, rewarewa, kamahi, rimu, totara. Mahoe, pigeonwood and wheki tree ferns are also present, along with occasional black maire and lancewood. The understorey is dense in places and includes mapau, coprosmas, pate and hangehange. Ground cover seedlings and ferns are present throughout the forest, along with vines, orchids and other epiphytes, mosses, lichens and fungi.

Fauna

Native birds present include kereru, bellbird, tui, silver-eye, grey warbler, whitehead, fantail and ruru. Native migrant shining and long-tailed cuckoos are present during spring/summer months, and kingfisher, black shag, and Australasian harrier are also known to use the site as part of their wider habitat. Freshwater fish include notable species such as longfin eel, shortjaw kokopu & koaro. There is also good habitat for a range of reptiles and invertebrates.

Ecological Values

Sustainability - Positive In good vegetative condition. Under appropriate management, the

forest fragments can remain resilient and continue to contribute to

the wider ecological context.

Representativeness - Low Cathie Native Bush is a good example of Rata, tawa, kamahi,

podocarp forest (MF7-2) and contains vegetation associated with LENZ environment F5.3b. This type of forest is considered less reduced and better protected in Taranaki due to extensive areas falling under the protection of the nearby National Park. Forest remnants like these provide important habitat and connectivity for a range of native species and are vital linkages to more fragmented

habitats between the mounga and the sea.

Contains good habitat for the 'Nationally Vulnerable' shortjaw Rarity and Distinctiveness - High

kokopu, 'At Risk' longfin eel, koaro, redfin bully, black shag, longtailed cuckoo and whitehead. Three "Nationally Threatened" rata

species are also present.

Ecological context - High Enhances stepping-stone connectivity between the extensive forests

of Te Papakura o Taranaki (Egmont National Park) and fragmented indigenous habitats on the ring plain. Provides important mature riparian vegetation along the Mangorei stream linking riverine and

forest habitats.

Other Management Issues

Weeds are currently present in localised areas and present the main Weeds - High

> priority for management in the short term. Tradescantia, blackberry, African clubmoss, wilding cherry and holly are the

priority species for control.

Predators - High Species that prey on native birds, lizards and invertebrates include

> rodents (rats & mice) and hedgehogs, along with possums, mustelids and feral cats roving the wider landscape. The site is within phase 1 of the Towards Predator Free Taranaki rural predator control network and will benefit from regular effective predator control both within the remnant and that occurring in the

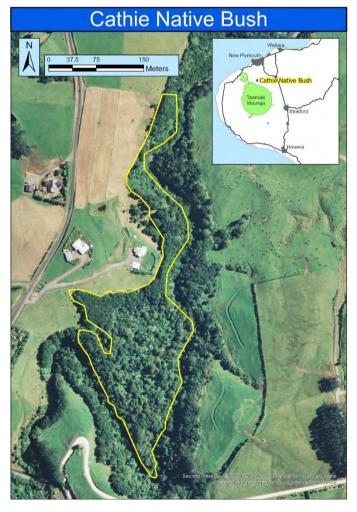
National Park and surrounding landscape.

The site is legally protected with QEII covenant, and are securely Habitat Modification - Low

fenced to exclude livestock.

Possum Self-help The site lies within the 'Korito' zone of the regional Possum Self

Help programme.



Katikara (TPOL)

At a glance

TRC Reference: BD/9719 LENZ: F5.3b Not threatened

Ecological District: Egmont National: Priority 4 – Threatened Species
Land Tenure: Private Regional: Representative ecosystem type

Area(ha): 20 Key Native Ecosystem

GPS: 1683915X & 5657935Y Regional Less reduced >50% left

Ecosystem Loss:

Habitat: Forest Remnant Protection Status: Local Government

Catchment: Katikara (382)

Bioclimatic Zone: Lowland

Ecosystem Type: MF8.2: Rimu, rata, kamahi

forest

General Description

Katikara (TPOL) is a 20 hectare block located on private land approximately 8.7m south-east of Okato. The remnant consists of an existing cutover lowland tawa/kamahi forest and is bordered on three sides by Te Papakura o Taranaki with the Katikara stream to the south. The Katikara (TPOL) remnant is situated in close proximity to other KNEs in the area including Pukeiti, Katikara Bush and Carrington Road B.

Ecological Features

Flora

This remnant is a good example of existing and regenerating lowland native forest, with a canopy consisting predominantly of kamahi, tawa and rimu. The understory consists many species including pigeonwood, kanono, lancewood and ferns. Ground cover is intact and climbers and epiphytes are abundant. Notably, four threatened species are present at this site including two species of rata, kanuka and manuka.

Fauna

Native birdlife recorded in and around the covenanted area include the shinig cuckoo, grey warbler, fantail, tui, bellbird, kereru, tomtit and morepork. The 'Threatened' long-tailed cuckoo is also present at this site and is notable for the area. Contains threatened native fish such as shortjaw kokopu, koaro and longfin eel. Likely to contain other notable fauna species such as reptiles and invertebrates.

Ecological Values

Sustainability - Positive Key ecological processes still influence the site and with

appropriate management, it can remain resilient to existing or

potential threats.

Representativeness - Low Contains indigenous vegetation classified as a 'Less reduced and

better protected' (F5.3b) LENZ environment. This site has been identified as a priority representative site for management.

Rarity and Distinctiveness - High Contains four newly listed 'Threatened' and 'At Risk' flora species

due to potential vulnerability to myrtle rust including two species of rata, kanuka and manuka. Contains threatened native fish such as shortjaw kokopu, koaro and longfin eel. Likely to contain other

notable fauna species such as reptiles and invertebrates.

Ecological context - High Provides additional habitat and greater connectivity with other

KNE in this area such as Katikara Bush, Lucien's Lot and Egmont

National Park.

Other Management Issues

Habitat Modification - Medium Protected from stock and protected by an agreement with TPOL

Herbivores - Medium Potential high risk from browsing although currently secure and in

good condition.

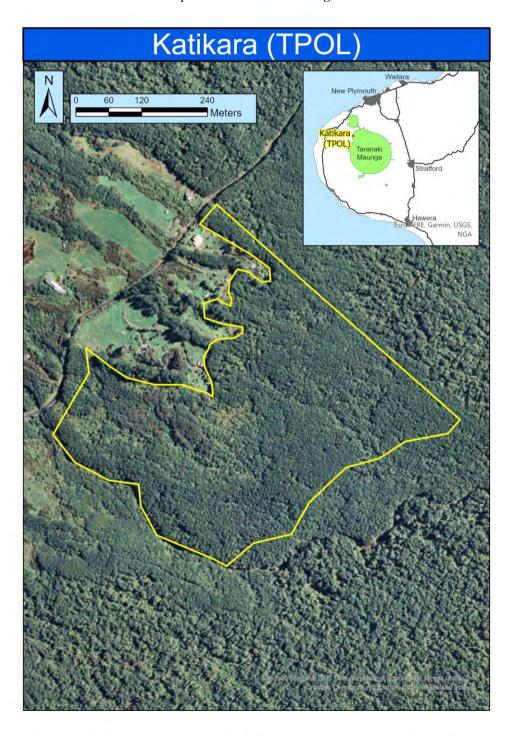
Possum Self-help The property is within the possum self-help area.

Predators - High Predators including rodents, mustelids, possums, feral cats and

hedgehogs will be having an impact on native species at the site.

Habitat Modification - Medium Gorse, african clubmoss, blackberry, pine, gum and redwood trees

are present on the bush margins



Larcom's Homestead

At a glance

TRC Reference: BD/9717 LENZ: F5.2a Acutely threatened

Ecological District: Matemateaonga F7.2a At risk

Land Tenure: Private National: Priority 1 – Threatened Land

Area(ha): 2 Environment

GPS: 1718600X & 5625282Y Priority 4 - Threatened Species

Regional: Key Native Ecosystem

Habitat: Forest Remnant Regional At risk 20-30% left

Ecosystem Loss:

Bioclimatic Zone: Lowland Catchment: Tangahoe (348)

Ecosystem Type: MF7.3: Tawa, pukatea,

podocarp forest

General Description

Larcom's Homestead forest remnant is located on private land approximately 9 kilometres east of Normanby off Morea Road in South Taranaki. The remnant lies within the Matemateaonga Ecological District and Tangahoe River catchment. The 2 hectare forest remnant consists of older cut over lowland podocarp forest with a dominant canopy of karaka, tawa and pukatea. Larcom's Homestead forest remnant enhances connectivity between fragmented indigenous habitats in this area including Lake Rotokare Scenic Reserve, The Totaras and Cotebrook KNE's

Ecological Features

Flora

The 2 hectare forest remnant consists of older cut over lowland podocarp forest with a dominant canopy of karaka, tawa and pukatea. The younger lower canopy is dominated by nikau, mahoe, pigeonwood and tree ferns. Ground cover, climbers and epiphytes are common. Notable species for the site includes the 'Regionally Distinctive' jointed fern, 'Threatened' poroporo, and one species of climbing rata (recently classified as 'Threatened' due to myrtle rust threats).

Fauna

Native birds present include kereru, tui, bellbird, silvereye, shining cuckoo, grey warbler, fantail, kingfisher and morepork. There is very good habitat for a range of other native species including reptiles and invertebrates. Notable fauna species present include the 'Regionally Distinctive' goldstripe gecko.

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		Values
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Sustainability - Positive Key ecological processes still influence the site and with

appropriate management, it can remain resilient to existing or

potential threats.

Ecological context - High Provides additional habitat and greater connectivity with other

forest remnants, habitat corridors and Key Native Ecosystems in

the area.

Representativeness - High Contains indigenous vegetation classified as a 'At Risk' forest type

and an 'Acutely Threatened' (F5.2a) LENZ environment.

Rarity and Distinctiveness - High
The site contains the nationally vulnerable poroporo and jointed

fern. It also contains a 'Nationally Threatened' species of rata owing to myrtle trust threats, and the 'At Risk' and 'Regionally Distinctive'

goldstripe gecko.

Other Management Issues

block. The site is now stock proof but upgrades to the fence is

needed in some areas.

Predators - High Possums, cats, mustelids, hedgehogs and rats

Weeds - Medium The site has areas of ginger, tradescantia, montbretia, ivy, banana

passionfriut and blackberry. These mostly exist around the bush

margins, therefore access for control is easy.

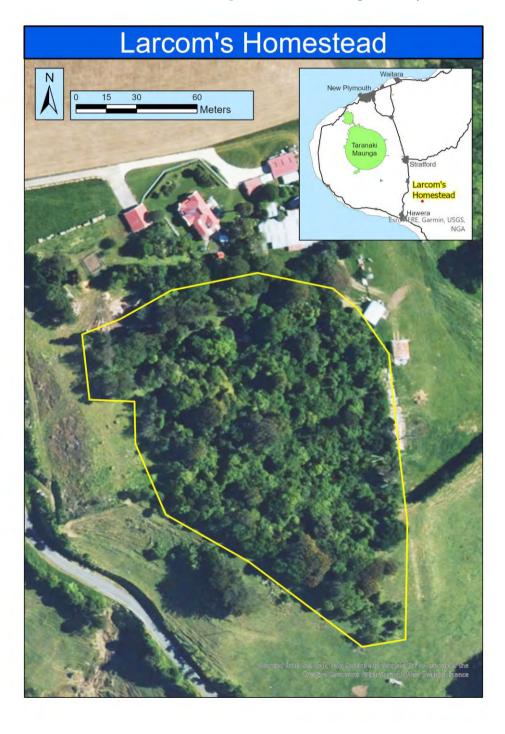
Herbivores - Medium Some old stock damage at the southern end. Fence at the northern

end is still vulnerable to stock and goats, however the risk on

incursion is low.

Possum Self-help The site is not within the self-help area. Landowners still carry out

intermittent possum control throughout the year.



Lark's Rest

At a glance

TRC Reference: BD/9713 LENZ: H1.3b Under protected

Ecological District: Egmont National: Priority 4 – Threatened Species

At risk 20-30% left

Land Tenure: Private Regional: Key Native Ecosystem

Area(ha): 1.7 Regional

GPS: 1684962X & 5638190Y Ecosystem Loss:

Catchment: Taungatara (361)

Habitat: Forest Remnant

Bioclimatic Zone: Lowland

Ecosystem Type: MF7.3: Tawa, pukatea,

podocarp forest

General Description

Lark's Rest forest remnant is located on privately owned land, 12.5km north east of Opunake. The site is in the Egmont Ecological District and located within the Taungatara stream catchment. Tawa, pukatea, pigeonwood and hinau are the dominant canopy species of this cutover forest remnant, with small pockets of swamp maire and kahikatea. The remnant is comprised of a native forest type (MF7.3: Tawa, pukatea, podocarp forest) that has been greatly reduced in Taranaki. The nearest protected sites include other Key Native Ecosystems in the area, such as Wiremu Road Wetland, Kaweora Road Forest and Te Papakura o Taranaki (Egmont National Park).

Ecological Features

Flora

Tawa, pukatea, pigeonwood and hinau are the dominant canopy species, with pockets of swamp maire and kahikatea, typical of a swamp forest mosaic. The understory consists of pigeonwood, mahoe, pate, coprosma species and ferns. Recent myrtle rust threats have elevated potentially vulnerable native flora species to 'Threatened' 'At Risk' status. Notably, four of these vulnerable species are present at this site including three species of climbing rata and swamp maire. Another notable species for this site is poroporo.

Fauna

Native birds present include kereru, tui, silvereye, grey warbler, fantail, kingfisher, harrier and morepork. The landowners described lizard findings, likely to be of notable species. Freshwater crayfish are present in the stream. There is very good habitat for a range of other notable native species including freshwater fish, reptiles and invertebrates.

Ecological Values	
Ecological Context - Medium	Enhances connectivity between other Key native Ecosystems in the area, including Kaweora Road Forest, Wiremu Road Wetland and Te Papakura o Taranaki (Egmont National Park).
Rarity and Distinctiveness - High	Provides habitat for, and also likely to contain other notable fauna species including reptiles and invertebrates. Also contains notable species including three species of climbing rata, swamp maire and poroporo.
Ecological Context - Medium	The ecosystem type is considered 'At Risk' with only 26% of this forest type remaining in Taranaki. Contains indigenous vegetation on H1.3b– a 'Under protected' LENZ environment.

Other Management Issues

recruitment of some wetland tree species over time. While the habitat could be vulnerable to modification, there are no immediate threats, aside from localised track cutting to improve access for

possum control.

Herbivores - Low Stock are excluded from the site, therefore herbivore threats to the

site are low at present.

Possum Self-help This site falls within the Opunake possum self-help operation.

Control is by way of poisoning using Brodificoum, and possum

master traps.

Predators - Medium Predators including rodents, mustelids, possums, hedgehogs and

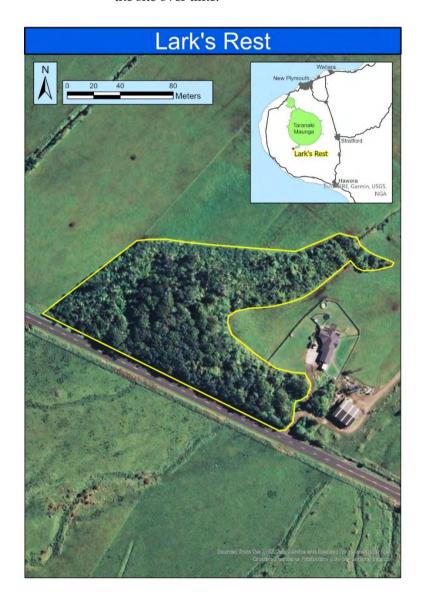
feral (and domestic) cats will be having an impact on native species

at the site.

Weeds - Medium Currently a medium threat to this site. Pampas, barberry, wild

cherry, inkweed and blackberry are present in and around the site, and if left uncontrolled may pose a larger threat to the viability of

the site over time.



Makara Farms

At a glance

TRC Reference: BD/9700 LENZ: F7.2a At risk

Ecological District: North Taranaki F5.2a Acutely threatened

Land Tenure: Private National: Priority 1 – Threatened Land

Area(ha): 13.4 Environment

Priority 4 - Threatened Species

GPS: 1713579X & 5652561Y Regional: Key Native Ecosystem

Regional At risk 20-30% left

Habitat: Forest Remnant Ecosystem Loss:

Bioclimatic Zone: Lowland Protection Status: QEII Covenant

Ecosystem Type: MF7.3: Tawa, pukatea, Catchment: Waitara (395)

podocarp forest

General Description

The Makara Farms potential KNE is located on privately owned land, approximately 10km North East of Midhirst. It is made up of three individual bush blocks, totalling 13.4 hectares (1.8ha and 2.9 Schumacher blocks and 8.7ha Cookson Block). The sites lie in the Waitara River catchment within the North Taranaki Ecological District. Tawa, pukatea and rewarewa are the dominant canopy species in all three blocks, with a few miro and rimu. The remnants are comprised of a native forest type (MF7.3: Tawa, pukatea, podocarp forest) that has been greatly reduced in Taranaki. The nearest protected sites include Oberland and Harlow Fern KNEs and private QEII's, although small forests remnants and forested gullies are abundant in the surrounding area.

Ecological Features

Flora

The forest canopy is dominated by tawa, pukatea and rewarewa, with the occasional miro. The understory is mainly pate and kanano, with groundcover an abundance of ferns, seedlings and native grasses. Recent myrtle rust threats have elevated potentially vulnerable native flora species to 'Threatened' 'At Risk' status. Notably, four of these vulnerable species are present at this site including three species of climbing rata, and manuka.

Fauna

Native birds present include kereru, tui, silvereye, grey warbler, fantail, kingfisher and harrier. Morepork will also be present. There is very good habitat for a range of other notable native species including reptiles and invertebrates.

ECO	logical	values

Ecological Context - Medium Enhances connectivity between fragmented indigenous habitats in

this area including Oberland and Harlow Fern KNE's and other

small private QEII covenants.

Rarity and Distinctiveness -

Medium

Contains four newly listed 'Threatened' and 'At Risk' flora species due to potential vulnerability to myrtle rust, including three species

of rata and manuka. Also likely to contain notable fauna species

including reptiles and invertebrates.

Representativeness - Medium Contains indigenous vegetation on an 'Acutely Threatened' (F5.2b)

and 'At Risk' (F7.2a) land environment. Less than 10% and 30%

indigenous vegetation remains in these environments

(respectively). Species threatened by habitat loss are often reliant

on these remaining habitats for their continued survival. Is a remnant of an ecosystem considered 'At Risk' (MF7.3: Tawa, Pukatea, podocarp forest) in Taranaki.

Sustainability - Positive

In good vegetative condition due to the challenging terrain of the site, despite stock access in previous ownership. Key ecological processes still influence the site and with appropriate management, it can remain resilient to existing or potential threats.

Other Management Issues

Habitat Modification - Low Neighbouring grazing land is being transitioned to exotic forestry.

There are no immediate threats of habitat modification, although

the site may be impacted on by exotic species.

Herbivores - Medium Stock have access to the site in places, but steep topography limits

their accessibility.

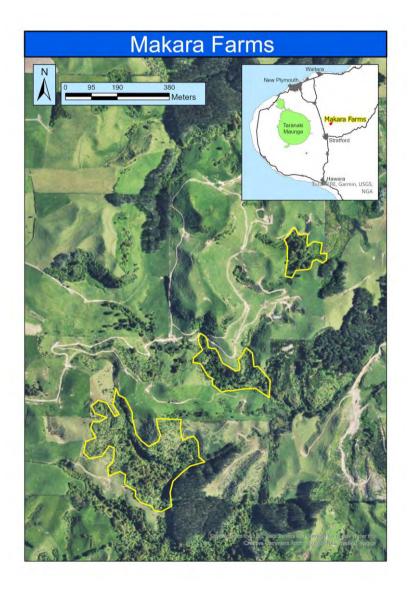
Predators - Medium Predators including rodents, mustelids, possums, feral cats and

hedgehogs will be having an impact on native species at the site.

Weeds - Medium Weeds present include Himalayan honeysuckle, blackberry,

ragwort, gorse, agapanthus, barberry and wild cherry, which are mostly confined to the bush margin. Pines, blackwoods and newly

planted redwoods may also impede on the site.



Sustainability 1 ositiv

Monk Road Bush

At a glance

TRC Reference: BD/9705 LENZ: F5.2c Acutely threatened Ecological District: Manawatu Plains National: Priority 1 – Threatened Land

Land Tenure: Private Environment

Area(ha): 3.2 Priority 4 – Threatened Species

GPS: 1742493X & 5600691Y Regional: Key Native Ecosystem

Representative ecosystem type

Habitat: Forest Remnant Regional At risk 20-30% left

Ecosystem Loss:

Bioclimatic Zone: Semi-Coastal Protection Status: QEII Covenant

Ecosystem Type: MF7.3: Tawa, pukatea, Catchment: Whenuakura (342)

podocarp forest

General Description

Monk Road Bush is located 4 km north-east of Waverley. The forest remnant is located on privately owned land, which has been protected with a QEII covenant since the early 1990's. The catchment lies in the Manawatu Plains Ecological District. The forest is dominated by karaka, with tawa, pukatea and nikau present.

Ecological Features

Flora

The forest canopy is dominated by karaka, with occasional specimens of tawa and pukatea entering the top layer of forest. The understory includes karo, hangehange, kawakawa, and a variety of ferns, with nikau present in canopy gaps. Ground cover, climbers and epiphytes are common.

Fauna

Native birds recorded from the remnants include kereru, tui, fantail, and grey warbler. 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. Notable native 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.

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 Provides important habitat and good connectivity with other Key

Native Ecosystems and large forest areas in the region.

as: Threatened - Nationally Vulnerable

Representativeness - High The remnant is located within an area classified as an Acutely

Threatened land environment (LENZ F5.2c). Indigenous vegetation is rare in these areas as this environment type has largely been cleared for farmland. The ecosystem type is MF7-3, Tawa, pukatea, podocarp forest, which is classified as 'At risk'. There is only approximately 26% of this forest type left in the Taranaki region.

Other Management Issues

Weeds - Low No invasive weed species present.

Habitat Modification - Low

Predators - High Possums are targeted by occasional control, the site would benefit

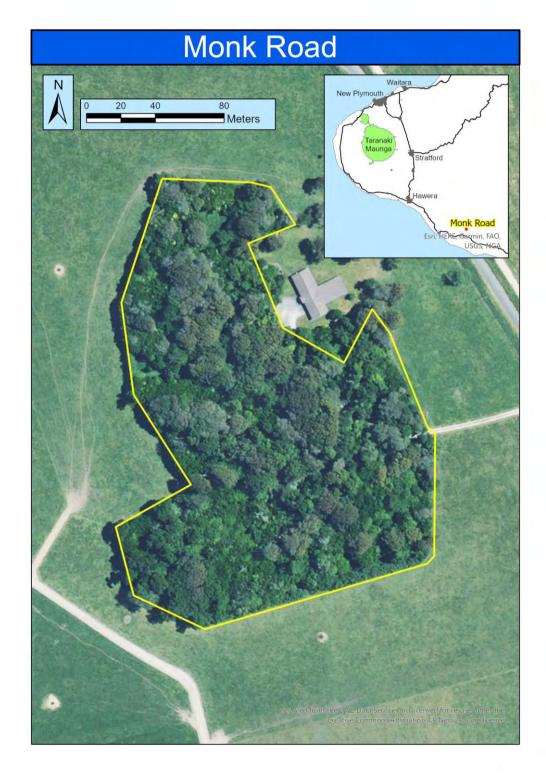
from continuous control due to the close proximity to sources of reinvasion. Native fauna would also benefit from a predator control program targeting other introduced predators such as feral cats,

mustelids, hedgehogs and rats.

Possum Self-help The site is outside the current self help possum control area.

The remnant is securely fenced and protected under a QEII

covenant



PARGus & CarLoom Bush Blocks

At a glance

TRC Reference: BD/9715 LENZ: F5.3a Not Threatened

Ecological District: Egmont F5.2a Acutely threatened

Land Tenure: Private National: Priority 4 – Threatened Species

Area(ha): 0.7 + 1.9 = 2.6ha

GPS: 1704672X & 5649468Y

Priority 2 – Sand Dunes and

Wetlands

Habitat: Forest Remnant/Wetland

Priority 1 – Threatened Land

Environment

Bioclimatic Zone: Lowland

Ecosystem Type: MF7.2: Rata, tawa, kamahi, Regional:

podocarp forest

Regional: Key Native Ecosystem

Regionally Significant Wetland

MF8.3: Kahikatea, rimu, kamahi Regional Less reduced >50% left Ecosystem Loss:

Reduced 30-50% left

Protection Status: Local Government

Catchment: Waitara (395)

General Description

PARGus & CarLoom bush blocks are located on private land, approximately 4km west of Midhirst in central Taranaki. The site consists of two cutover lowland forest/swamp remnants, situated on flat and sloping land, extending down to the Rum Keg Creek margin which flows into the Waitara (395) catchment. The remnants are of native forest types that are classified as 'Reduced' and 'Less reduced' in Taranaki and partly fall within 'Acutely Threatened' Land Environment (LENZ) F5.2a. Remnants such as this provide important habitat for rare and threatened species The site provides connectivity with other forest remnants, habitat corridors and Key Native Ecosystems in the area.

Ecological Features

Flora

The site includes two wetland mosaic forest remnants, one to the west (PARGus) and one to the east (CarLoom). The western block's canopy is dominated by kamahi and kanono with a decent stand of swamp maire. Other individual forest trees are present including mahoe, kahikatea, rimu, and tree fuchsia. The eastern block has a canopy dominated by swamp maire and mahoe with other species such as kanono, tawa and fuchsia being common. Both remnants include understory species such as wineberry, mahoe, pate and tree ferns. Ground cover, climbers and epiphytes are common. Notable flora includes the threatened swamp maire and white rata.

Fauna

Birds are generally in moderate to low numbers in the area and include kereru, tui, fantail, grey warbler and silvereye. The landowners have also spotted karearea and dabchick in the area recently. 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, brown skink and ornate skink. The habitat will contain a diverse range of terrestrial invertebrates likely including notable species such as peripatus. The wetland forest remnant to the east is connected to Rum Keg creek which contains good habitat for native fish. Notable species could be present including longfin eels and large galaxiid species.

Ecological Values

Sustainability - Positive Key ecological processes still influence the site and with

appropriate management, it can remain resilient to existing or

potential threats.

Ecological context - High Provides additional habitat and greater connectivity with other

forest remnants, habitat corridors and Key Native Ecosystems in

the area.

Representativeness - High Contains indigenous vegetation classified as a 'Reduced' forest type

and an 'Acutely Threatened' (F5.2a) LENZ environment.

Rarity and Distinctiveness -

Medium

The site contains the nationally threatened swamp maire and white

rata. There is also potential for notable species such as shortjaw

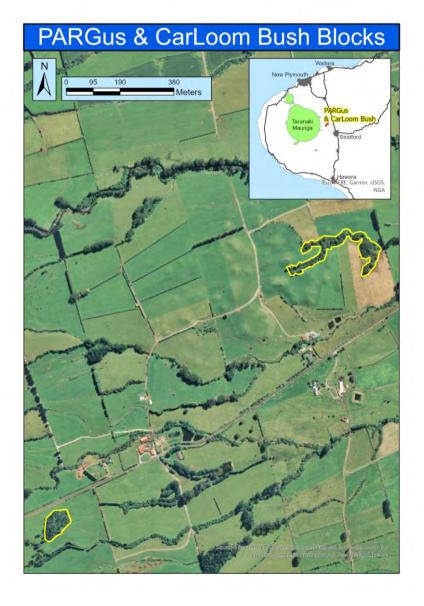
kokopu, koaro and native lizards to be present.

Other Management Issues

Possum Self-help Within the self-help area and receives possum control. Weeds - Medium Willow, holly, blackberry and montbretia are present.

Predators - Medium Possums, cats, mustelids, hedgehogs and rats

vulnerable to modification



Ryan Forest remnant

At a glance

TRC Reference: BD/9551

LENZ:
F5.2b Acutely threatened

Ecological District: Egmont

Local:
Significant Natural Area

Land Tenure: Private

Regional:
Key Native Ecosystem

Area(ha): 1.75 Regional Chronically threatened 10-20%

GPS: 1699212X & 5674086Y Ecosystem Loss: left

Catchment: Waiongana (394)

Habitat: Forest Remnant

Bioclimatic Zone: Semi-Coastal

Ecosystem Type: WF13: Tawa, kohekohe,

rewarewa, hinau, podocarp

forest

General Description

Ryan forest remnant is located on privately owned land on the south-eastern outskirts of New Plymouth. It lies in the Egmont Ecological District. Ryan forest remnant is dominated by large tawa trees, with kingfern and scarlet rata being two notable species present. The remnant is 1.75 ha, with several small forest remnants, and the larger Umutekai forest wetland in close proximity.

Ecological Features

Flora

Forest with wetland/swamp forest area on southern side. Tawa dominant, with puriri, nikau and mahoe commonly found. Carex, raupo and flax common in swamp forest areas.

Fauna

Native fauan observed on day of condition assessment includes fantail, kereru, tui, king fisher, and hawk.

Ecological Values

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

Ecological Context - Medium Close to Umutekai and other small forest remnants.

Representativeness - High Good example of indigenous vegetation on F5.2b - an 'Acutely

Threatened' LENZ environment. Is a remnant of ecosystems considered 'Acutely threatened' (WF8; Kahikatea, pukatea forest) and 'Chronically threatened' (WF13; Tawa, kohekohe, rearewa, hinau, podocarp forest) from it's pre-european extent. Less than 10%, and 10-20% (respectively) of these ecosystem types remain in

Taranaki.

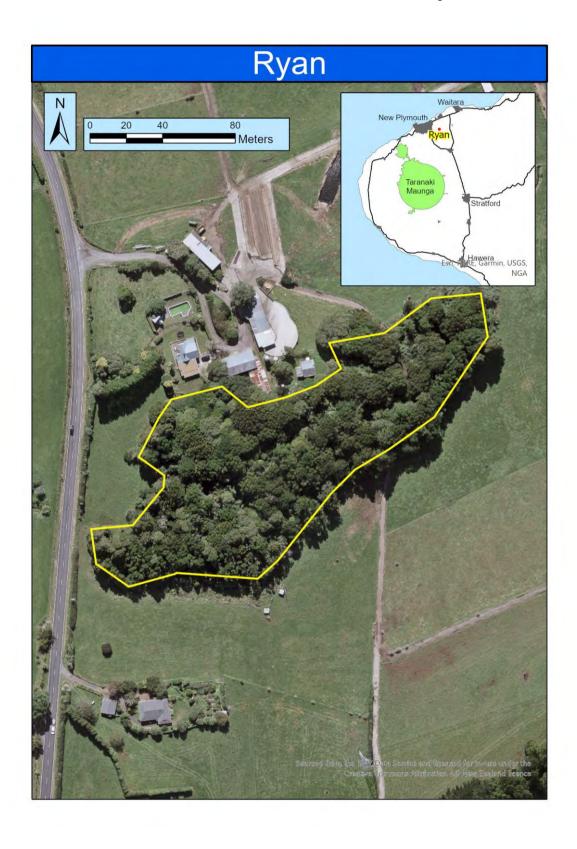
Rarity and Distinctiveness - High Contains the 'At Risk' king fern, and 'Threatened' scarlet rata.

Other Management Issues

Herbivores - Low The site is fully fenced and protected from livestock.

Possum Self-help Part of possum self-help programme
Habitat Modification - Low Wetland area appears free from drainage.

Tradescantia, ginger, blackberry and holly present in areas. Possums, cats, rats, and mustelids will be present.



Te Ngahere o Manu KNE

At a glance

Area(ha): 1

TRC Reference: BD/9727 LENZ: F5.2b Acutely threatened

Ecological District: Egmont National: Priority 4 – Threatened Species

Land Tenure: Private Priority 1 - Threatened Land

Environment

GPS: 1693518X & 5672842Y Regional: Key Native Ecosystem

Regional Chronically threatened 10-20%

Ecosystem Loss: left

Habitat: Forest Remnant Protection Status: QEII Covenant - Pending

Bioclimatic Zone: Semi-Coastal Catchment: Huatoki (389)

Ecosystem Type: WF13: Tawa, kohekohe,

rewarewa, hinau, podocarp

forest

General Description

Te Ngahere o Manu KNE consists of a privately owned 1 ha semi-coastal forest that is part of a larger block of mature forest. The site is located at the south western fringe of New Plymouth bordering the Huatoki Stream and lies in the Egmont Ecological District. The site is comprised of ecosystem type WF13: Tawa, kohekohe, rewarewa, hinau, podocarp forest, and enhances connectivity between fragmented indigenous habitats in this area. Forest remnants like this are under-represented in Taranaki owing to widespread clearance for agricultural and urban development. The site is connected to Tupari Reserve and Huatoki Domain, and is in close proximity to other Key Native Ecosystems in the area including Pukekura Park and the Ratapihipihi Scenic Reserve.

Ecological Features

Flora

The main canopy of the old forest area is dominated by pukatea, kohekohe and tawa. The lower canopy is dominated by mahoe, nikau and other 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 'At Risk' kingfern. There are also two species of threatened rata present, Metrosideros fulgens and M. perforata.

Fauna

Tui are the most noticeable native bird within the block although kereru, bellbird, fantail, grey warbler and silvereye are also present. Some notable reptile species may also be present. Banded kokopu, giant kokopu, lamprey and longfin eels have been recorded in the Huatoki stream.

Ecological Values

Rarity and Distinctiveness - High Contains the 'At Risk' kingfern. Recent myrtle rust threats have

elevated potentially vulnerable native flora species to 'Threatened' status. Notably, two of these new threatened species are present,

Metrosideros fulgens & M. perforata.

Representativeness - High Contains indigenous vegetation on F5.2b - an 'Acutely Threatened'

LENZ environment. The ecosystem type is classified as WF13, Tawa, kohekohe, rewarewa, hinau, podocarp forest of which there is approximately 16% of this ecosystem type remaining in the

region.

Ecological context - High The site is connected to Tupari Reserve and Huatoki Domain which

together form one of the largest blocks of tall stature native

vegetation close to the center of New Plymouth.

Sustainability - Positive Ecological processes still influence the site. Under appropriate

management it can remain resilient to existing or potential threats.

Other Management Issues

Weeds - High Occasional patches and individual weeds such as old man's beard,

Tradescantia, woolly nightshade, climbing asparagus, wild cherry,

African clubmoss and gorse.

Herbivores - Low Currently stock proof. Feral goats and deer are rare/ absent on the

ringplain.

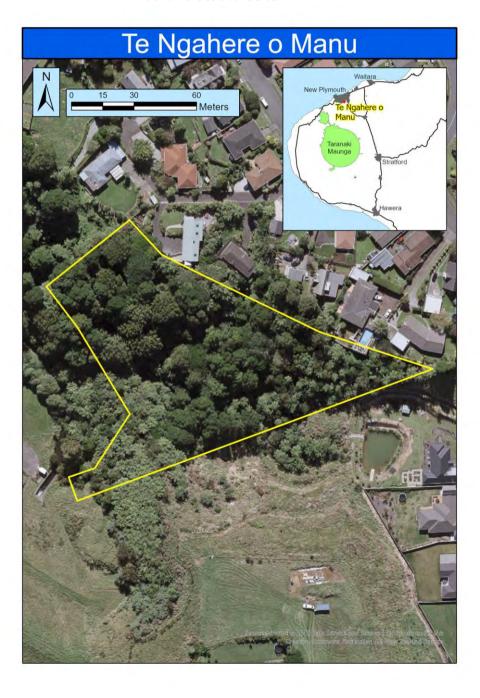
Habitat Modification - Low Small areas of cleared vegetation. Some garden species also

naturalising within block.

Possum Self-help The site lies within the self-help area.

Predators - High Rodents, mustelids, feral cats and hedgehogs will be impacting on

fauna values at the site.



Tersana

At a glance

TRC Reference: BD/9721 LENZ: F7.2a At risk

Ecological District: North Taranaki National: Priority 1 – Threatened Land

Land Tenure: Private Environment

Area(ha): 1.45 Priority 4 - Threatened Species

GPS: 1720925X & 5668437Y Regional: Key Native Ecosystem

Close proximity to a

Habitat: Forest Remnant representative ecosystem site

Regional At risk 20-30% left

Bioclimatic Zone: Lowland Ecosystem Loss:

Ecosystem Type: MF7.3: Tawa, pukatea, Protection Status: QEII Covenant

podocarp forest Catchment: Waitara (395)

General Description

The Tersana forest remnants are located on privately owned land approximately 17km east of Inglewood, near Tarata in Eastern Taranaki. The combined 6.7ha forest remnants lie in the North Taranaki Ecological District and Waitara River catchment. The forest canopy is dominated by tawa, pukatea and totara, with occasional miro, rimu and rewarewa. The forest is close to the Taramoukau Conservation Area, Junction Road and Oapui Forestry Sanctuary. The site also provides good connectivity to other forest remnants including Fairy Forest, Punanga and Watsons Hill Bush KNEs and the Tarata Conservation Area.

Ecological Features

Flora

The forest canopy is dominated by tawa, pukatea and rewarewa, with the occasional miro and rimu. The understory and ground cover is mainly kawakawa, pate and kanono, and an abundance of ferns, seedlings and native grasses. Recent myrtle rust threats have elevated potentially vulnerable native flora species to 'Threatened' and 'At Risk' status. Notably, five of these new vulnerable species are present at this site including ramarama, manuka and three species of climbing rata.

Fauna

Native birds present include kereru, tui, silvereye, grey warbler, fantail, harrier, kingfisher and morepork. Notably, the 'At Risk' NZ falcon has been observed by the landowners at the site. There is good habitat for native reptiles including dense forest canopy, loose bark, logs on the forest floor and leaf litter. Notable species may be present at this site. Good roost trees and foraging areas are available at this site. Long-tailed bats may be present and could be detected using recorders.

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Ecological context - Fligh	Ennances connectivity between fragmented indigenous habitats in
	this area, including Taramoukou Conservation Area, Junction Road
	and Oapui Forestry Sanctuary. The site also provides good
	connectivity to other forest remnants including Fairy Forest,

Punanga and Watsons Hill Bush KNEs and the Tarata

Conservation Area.

Rarity and Distinctiveness -

Medium

Contains five newly listed 'Threatened' and 'At Risk' flora species due to potential vulnerability to myrtle rust including ramarama, manuka and three species of climbing rata, Also likely to contain notable fauna species including reptiles and invertebrates.

Representativeness - Medium Contains indigenous vegetation on an 'At Risk' (F7.2a) land

environment. Less than 30% indigenous vegetation remains in these environments. Species threatened by habitat loss are often reliant on these remaining habitats for their continued survival. Is a remnant of an ecosystem considered 'At Risk' (MF7.3: Tawa,

Pukatea, podocarp forest) in Taranaki.

Sustainability - Positive In good vegetative condition. Key ecological processes still

influence the site and with appropriate management, it can remain

resilient to existing or potential threats.

Other Management Issues

Habitat Modification - Low There are no immediate threats to the site.

Herbivores - Low Fences around the sites are fully stock proof, therefore threats from

grazing animals are very low. Deer and goats are seldom seen around the farm, but are culled by the landowners if and when

sited.

Predators - Medium Predators including rodents, mustelids, possums, feral cats and

hedgehogs will be having an impact on native species at the site.

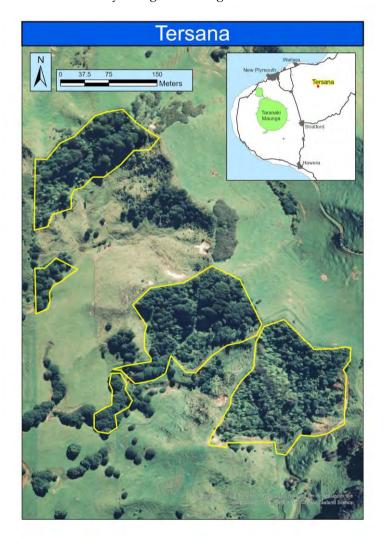
Weeds - Low Currently a low threat at this site with occasional shrub weed

species.

Possum Self-help The site is outside the current possum self-help program boundary

although receives occasional possum control by the landowners by

way of night shooting.



The Ram Paddock (Larcom's)

At a glance

TRC Reference: BD/9718 LENZ: F1.3b Less reduced, better

Ecological District: Matemateaonga protected

Land Tenure: Private National: Priority 1 - Threatened Land

Environment

Area(ha): 2

GPS: 1721367X & 5629645Y

Priority 4 – Threatened Species

Regional: Key Native Ecosystem

Regional At risk 20-30% left

Habitat: Forest Remnant Ecosystem Loss:

Bioclimatic Zone: Lowland

Ecosystem Type: MF7.3: Tawa, pukatea,

podocarp forest

General Description

The Ram Paddock (Larcom's) forest remnant is located on private land approximately 13 kilometres northeast of Normanby off Makino Valley Road in South Taranaki. The remnant lies within the Matemateaonga Ecological District and Tangahoe River catchment. The 2 hectare forest remnant consists of lowland podocarp forest with a dominant canopy of tawa and pukatea. The Ram Paddock forest remnant enhances connectivity between fragmented indigenous habitats in this area including Lake Rotokare Scenic Reserve, The Totaras, Colliers and Oha Honey KNE's

Ecological Features

Flora

The 2 hectare forest remnant consists of podocarp forest with a dominant canopy of tawa and pukatea. The understory is constantly impacted by stock so remains mostly bare however species present include mahoe, shining karamu and manuka at the margins. A range of native ferns occupy the site including wheki, water fern, leather lead fern, creek fern and more. Climbers and epiphytes are common. Recent myrtle rust threats have elevated potentially vulnerable native flora species to 'Threatened' status. Notably, four of these new threatened species are present at this site including three species of climbing rata, and manuka.

Fauna

Native birds present include tui, fantail, grey warbler, harrier, kingfisher, silvereye and kereru. There is also habitat for a range of other native species including reptiles and invertebrates.

Ecological Values	
Rarity and Distinctiveness - Medium	The site contains three species of 'threatened' rata. There is also potential that it provides habitat for other notable species of birds, reptiles and invertebrates.
Representativeness - Medium	Contains indigenous vegetation classified as 'At Risk' forest type (MF7.3: Tawa, pukatea, podocarp forest) in Taranaki. Less than 30% indigenous vegetation remains in these environments. Native biodiversity in these areas is greatly depleted and under threat from continued habitat.
Ecological context - High	Provides connectivity to other habitats in the area including Lake Rotokare scenic reserve, The Totaras KNE, Oha Honey KNE and Colliers KNE.

Sustainability - Negative Vegetation is being heavily impacted by stock. If stock were to be

excluded from the remnant through fencing, the site will greatly

benefit.

Other Management Issues

Predators - High The site sits in the Rotokare halo area and receives landscape scale

mustelid and feral cat control. Possums, cats, mustelids, hedgehogs

and rats will be impacting the site.

Weeds - Medium The site has areas of inkweed, barberry and Himalayan

honeysuckle.

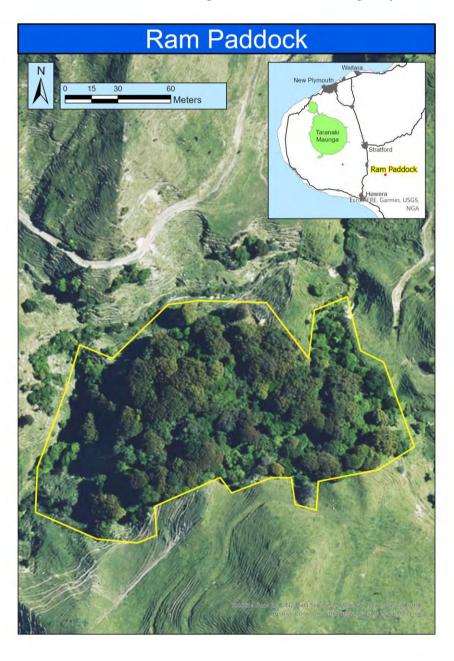
Herbivores - High Cattle and sheep have full access to this site and are therefore

heavily impacting on native vegetation and forest regeneration.

Exclusion of all stock through fencing is recommended.

Possum Self-help The site is not within the self-help area.

cattle. Fencing to exclude stock would greatly benefit the site.



Waiongana Flats Ltd

At a glance

TRC Reference: bd/7060 LENZ: F5.2a Acutely threatened Ecological District: Egmont National: Priority 1 – Threatened Land

Land Tenure: Private Environment

Area(ha): 3.9 Regional: Key Native Ecosystem

GPS: 1705388X & 5671132Y Regional Chronically threatened 10-20%

Ecosystem Loss: left

Habitat: Forest Remnant

Catchment: QEII Covenant

Waiongana (394)

Bioclimatic Zone: Lowland

Ecosystem Type: WF13: Tawa, kohekohe,

rewarewa, hinau, podocarp

forest

General Description

The Waiongana Flats forest remnants are two QEII blocks located on privately owned land 4.5km south of Lepperton, within the Egmont Ecological District and Waiongana Stream catchment. The remnants total 3.9ha in size (two remnants of: 2.4, 1.5ha) and are comprised of cutover lowland tawa dominant forest on hill slopes and stream terraces. The remnants are of a native forest type that is classified as 'Chronically Threatened' in Taranaki and fall within an 'Acutely Threatened' Land Environment (LENZ) F5.2a. Remnants such as these provide important habitat for rare and threatened species. The Waiongana Flats also offer good connectivity to other nearby habitats, covenants and Key Native Ecosystems in the area such as the Hooper's, Dobb's Family Trust, and Te Wairoa KNE's.

Ecological Features

Flora

The forest canopy is dominated by tawa and kohekohe, with occasional small stands of karaka, rewarewa, mahoe, and rimu. The understory is dominated by kanono and hangehange, with a mix of other species including kawakawa, pate, mahoe, nikau and tree ferns. Ground cover, climbers and epiphytes are common.

Fauna

Native birds recorded from the remnants include kereru, tui, fantail, grey warbler, and silvereye. 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. Notable native 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 in each remnant, which may contain notable native fish species such as kokopu and longfin eels.

Ecological Values

Rarity and Distinctiveness - High Contains the 'Nationally Vulnerable' scarlet rata (Metrosiderous

fulgens)

Representativeness - High The remnants are located within an area classified as an Acutely

Threatened land environment (LENZ F5.2a). Indigenous vegetation is rare in these areas as this environment type has largely been cleared for farmland. The ecosystem type is WF13, Tawa, kohekohe, rewarewa, hinau, podocarp forest which is classified as

'Chronically threatened'. There is only approximately 16% of this

forest type left in the Taranaki region.

Ecological context - High Provides important habitat and good connectivity with other Key

Native Ecosystems in the area.

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 The remnants are all securely fenced and protected under QEII

covenants

Possum Self-help Under Possum Self-help control

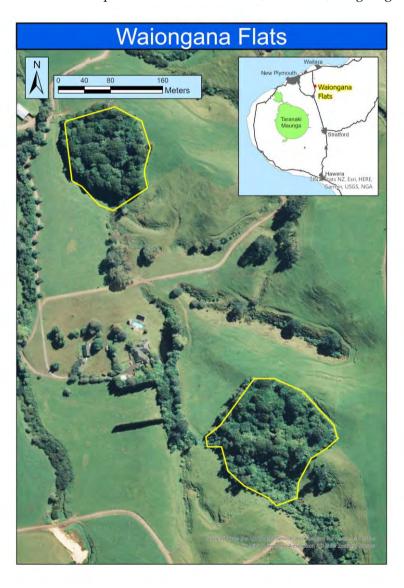
Weeds - Low Weed species limited in spread at this stage. Tradescantia along

waterways and banks, woolly nightshade on edges and in isolated

patches, small patch of gorse in one location.

Predators - High Possums are controlled in conjunction with the self help possum

control program and this will be helping to keep the forest canopy healthy and protect nesting birds. Native fauna would also benefit from a predator control program targeting other introduced predators such as feral cats, mustelids, hedgehogs and rats.



Waiongana Flats Ltd B

At a glance

TRC Reference: BD/9716 LENZ: F5.2a Acutely threatened Ecological District: Egmont National: Priority 1 – Threatened Land

Land Tenure: Private Environment

Area(ha): 1.8 Regional: Key Native Ecosystem

GPS: 1703846X & 5671728Y Regional Chronically threatened 10-20%

Ecosystem Loss: left

Habitat: Forest Remnant

Catchment: QEII Covenant

Waiongana (394)

Bioclimatic Zone: Lowland

Ecosystem Type: WF13: Tawa, kohekohe,

rewarewa, hinau, podocarp

forest

General Description

The Waiongana Flats B forest remnant is located on privately owned land 4.5km south of Lepperton, within the Egmont Ecological District and Waiongana Stream catchment. The remnant is protected by a QEII covenant, 1.8ha in size, and is comprised of cutover lowland tawa dominant forest on hill slopes and a stream terrace. The remnant is of a native forest type that is classified as 'Chronically Threatened' in Taranaki and fall within an 'Acutely Threatened' Land Environment (LENZ) F5.2a. Remnants such as this provide important habitat for rare and threatened species. The Waiongana Flats Ltd B also offers good connectivity to other nearby habitats, covenants and Key Native Ecosystems in the area such as the Hooper's, Dobb's Family Trust, and Te Wairoa KNE's.

Ecological Features

Flora

The forest canopy is dominated by tawa and kohekohe, with occasional small stands of karaka, rewarewa, mahoe, and rimu. The understory is dominated by kanono and hangehange, with a mix of other species including kawakawa, pate, mahoe, nikau and tree ferns. Ground cover, climbers and epiphytes are common.

Fauna

Native birds recorded from the remnants include kereru, tui, fantail, grey warbler, and silvereye. 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. Notable native 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 in the remnant, which may contain notable native fish species such as kokopu and longfin eels.

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	Provides important habitat and good connectivity with other Key Native Ecosystems in the area.
Representativeness - High	The remnant is located within an area classified as an Acutely Threatened land environment (LENZ F5.2a). Indigenous vegetation is rare in these areas as this environment type has largely been cleared for farmland. The ecosystem type is WF13, Tawa,

kohekohe, rewarewa, hinau, podocarp forest which is classified as 'Chronically threatened'. There is only approximately 16% of this

forest type left in the Taranaki region.

Rarity and Distinctiveness - High The rata species Metrosideros fulgens is present, and is classified

as: Threatened - Nationally Vulnerable

Other Management Issues

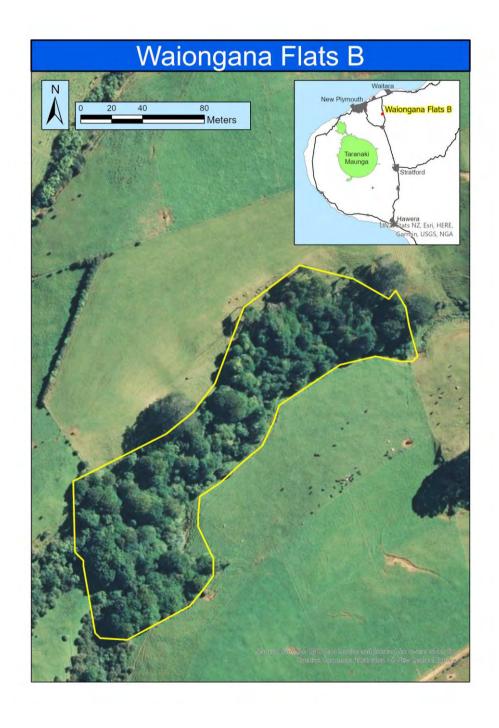
Habitat Modification - Low The remnant is securely fenced and protected under a QEII

covenant

Possum Self-help Within the possum self help area

Predators - High Possums, cats, rats, hedgehogs, and mustelids

Weeds - Medium Boundary weeds and some areas of tradescantia present



Wellington Bush

At a glance

TRC Reference: BD/9724 LENZ: H1.3a Acutely threatened Ecological District: Egmont National: Priority 1 – Threatened Land

Land Tenure: Private Environment

Area(ha): 2.6 Priority 4 – Threatened Species

GPS: 1711413X & 5668586Y Regional: Key Native Ecosystem

Close proximity to a

representative ecosystem site

Habitat: Forest Remnant

Regional

Acutely Threatened <10% left

Habitat: Forest Remnant Regional Acutely Threatened <10% left
Ecosystem Loss:

Ecosystem Type: WF13: Tawa, kohekohe, Catchment: Waitara (395)

rewarewa, hinau, podocarp

forest

General Description

The privately owned Wellington Bush is comprised of two forest remnants (1.9 and 0.7ha) located 8 km east of Inglewood on the bank of the Manganui River. The forest remnant is located in the Egmont Ecological Region, across the river from Everett Park, a Scenic Reserve administered by the Department of Conservation. The remnants are primarily kahikatea forest on relatively flat terrain. Initial assessment during summer found the forest floor to be dry, further visits will determine if the forest floor floods during winter. This type of forest is now very rare on the Egmont Ring Plain.

Ecological Features

Flora

Kahikatea dominated canopy, with tawa and rimu present. Various coprosma species present in understory as well as nikau, kawakawa and mahoe. Understory is sparse but recovering as the remnant has been fenced within the last 2-3 years, supplejack vines form thickets in areas. Ground cover is also recovering, various fern species are reappearing.

Fauna

Native bird species observed include kereru, fantail, paradise duck, king fisher and tui.

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	This remnant provides important connectivity between nearby Everett Park Reserve and other small remnants to the east, including Watsons Hill Bush, Fairy Forest KNE, ultimately leading to the larger Taramokukou Conservation Area and the northern and eastern hill country areas. The connectivity of these smaller remnants is crucial in allowing movement of native species to find food sources, nesting areas, and new habitats for young of the year.
Representativeness - High	Contains indigenous vegetation on H1.3a – an 'Acutely Threatened' LENZ environment

Rarity and Distinctiveness - High

Contains the "Threatened" rata species Metrosideros fulgens, on land classified "Acutely Threatened" and an ecosystem classified "Chronically Threatened".

Other Management Issues

Habitat Modification - Low

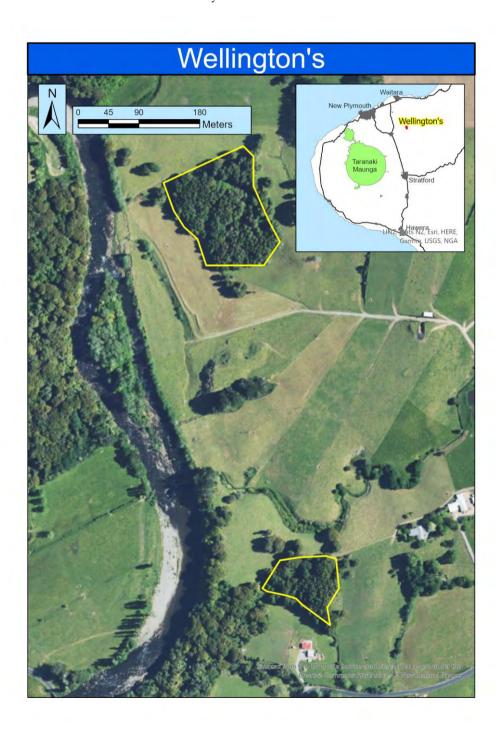
Herbivores - Low Currently stock proof although fencing upgrades are required

Possum Self-help Located outside of the Possum Self-help area.

Predators - Medium Possums, rats, and mustelids will be present.

Weeds - Medium Occasional shrub weeds on forest boundary, considerable

understory weeds in the smaller southern remnant



Wells Cross Rd

At a glance

Area(ha): 2.9

TRC Reference: BD/9674

LENZ: F5.2b Acutely threatened

Ecological District: Egmont

Local: Significant Natural Area

Land Tenure: Private National: Priority 1 – Threatened Land

Environment

GPS: 1706228X & 5674958Y Priority 4 - Threatened Species

Regional: Key Native Ecosystem

Habitat: Forest Remnant Regional Chronically threatened 10-20%

Ecosystem Loss: left

Bioclimatic Zone: Semi-Coastal Protection Status: Local Government Ecosystem Type: WF13: Tawa, kohekohe, Catchment: Weigngene (204)

rewarewa, hinau, podocarp Catchment: Waiongana (394)

forest

General Description

Wells' Bush is located on privately owned land on Cross Road, approximately 2 km south east of Lepperton township in North Taranaki. The site is within the Egmont Ecological District and located within the Waiongana catchment. The area is made up of three large semi-coastal forest remnants loosely joined by native revegetation/riparian planting throughout an unnamed tributary of the Mangaonaia Stream. The three remnants amount to approximately 2.9 hectares and have adequate fencing along most of the site boundary. Although the site has no formal protection under a covenant, the largest remnant is listed as a Significant Natural Area under the New Plymouth District Council's District Plan. The forest type (WF13) is classified as 'Chronically Threatened' as there is less than 16% of this type of forest left in Taranaki. The site is in close proximity to other Key Native Ecosystems in the area, including Hoopers Bush, Lepperton Bush, Te Wairoa, Cardenica Bush and Tegel QEII.

Ecological Features

Flora

The forest type is a mix of semi-coastal/lowland tawa/pukatea/kohekohe forest. Other canopy trees include titoki (Alectryon excelsus), miro (prumnopitys ferruginia), white maire (Nestegis lanceolata), rimu (dacrydium cupressinum), rewarewa (Knightia excelsa) and puriri (Vitex lucens). A number of other plant species are also present in the sub canopy including karaka (Corynocarpus laevigatus), mamaku (Cyathea medullaris), kawakawa (Piper excelsum), pigeonwood (Hedycarya arborea), pate (Schefflera digitata), mapou (Myrsine australis), nikau (Rhopalpstylis sapida), and mahoe (Melicytus ramiflorus). A diverse range of epiphytes were also present including the nationally vulnerable scarlett rata (Metersideros fulgens) and white rata (M. perforata), New Zealand jasmine (Parsonsia heterophylla), climbing hard fern (Blechnum filiforme), and green fleshy tree orchid (Drymoanthus adversus).

Fauna

Native birdlife recorded in and around the KNE include the grey warbler (Gerygone igata), fantail (Rhipidura fuliginosa), silvereye (Zosterops lateralis lateralis) and sacred kingfisher (Todiramphus sanctus vagans). Fish life in the nearby stream systems includes the 'At Risk' longfin eel (Anguilla dieffenbachii) and redfin bully (Gobiomorphus huttoni). Other aquatic life includes the shortfin eel (Anguilla australis), freshwater crayfish (Paranephrops planifrons), freshwater shrimp (Paratya) and the introduced brown trout (Salmo trutta). Good habitat exists for notable reptiles and invertebrates also.

Ecological Values

Sustainability - Positive Key ecological processes still influence the site. Under appropriate

management it will remain resilient to existing and potential

threats.

Ecological Context - Medium The site provides connectivity to other Key Native Ecosystems

nearby including Lepperton Bush and Tegal QEII.

Representativeness - High Contains indigenous vegetation that is poorly represented in

Taranaki and classified as F5.2b - an 'acutely threatened' LENZ

environment.

Rarity and Distinctiveness -

Medium

Contains the 'Nationally Vulnerable' scarlet rata (meterosideros

fulgens) and white rata (M. perforata)

Other Management Issues

Habitat Modification - Low The remnant is adequately fenced to prevent stock incursion and it

has not had stock present in the bush remnants for some time given

lush understory.

Herbivore Control Within the possum self help control area.

Weeds - Low Sparse woolly nightshade (Solanum mauritianum), with localised

heavy cover of African clubmoss (Selaginella kraussiana) and wandering willy (Tradescantia fluminensis). Some occasional arum

lilly (Zantedeschia aethiopica) in wet areas.

Predators - High Possums, cats, rats, hedgehogs and mustelids.

Herbivores - Medium Possums

