

Barrels Creek

At a glance

TRC Reference: BD/9730	LENZ:	F5.2b Acutely threatened
Ecological District: Egmont	Local:	Significant Natural Area
Land Tenure: Private	National:	Priority 1 – Threatened Land Environment
Area(ha): 2.4		Priority 4 – Threatened Species
GPS: 1706933X & 5674841Y	Regional:	Key Native Ecosystem
Habitat: Forest Remnant	Regional Ecosystem Loss:	Chronically threatened 10-20% left
Bioclimatic Zone: Semi-Coastal	Protection Status:	QEII Covenant
Ecosystem Type: WF13: Tawa, kohekohe, rewarewa, hinau, podocarp forest		Local Government
	Catchment:	Waiongana (394)

General Description

The Barrels Creek site is located on privately owned land 2.3km southeast of Lepperton and lies in the Egmont Ecological District and Waiongana Stream catchment. The site is approximately 2.4ha in size and comprised of cutover semi-coastal Tawa, kohekohe, rewarewa, hinau, podocarp forest remnants on hill slopes, flat land and stream terraces. The remnants are of a native forest type that is classified as 'Chronically Threatened' in Taranaki and falls within 'Acutely Threatened' Land Environment (LENZ) F5.2b. Remnants such as this provide important habitat for common, rare and threatened species. Barrels Creek contributes good connectivity with other nearby habitats, covenants and Key Native Ecosystems, such as Wells Cross Road, Hoopers Bush, Lepperton Bush, Tegel QEII and Te Wairoa.

Ecological Features

Flora

The forest canopy is dominated by tawa, kohekohe and puriri, with occasional individuals or small stands of rewarewa, pukatea and titoki. The understory is dominated by kawakawa, with a mix of other species including kanono, pate, pigeonwood, mahoe and tree ferns. Ground cover ferns and seedlings are common. A simple range of climbers and epiphytes are present. Notable flora includes two species of threatened rata and the At Risk, Declining' Kingfern and the 'Regionally Distinctive' jointed fern.

Fauna

Birdlife at the site is reasonably diverse and includes kereru, tui, 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. Notable reptile species may be present such as the goldstripe gecko. The habitat will contain a diverse range of terrestrial invertebrates, likely including notable species such as peripatus. Two small streams are present which may contain common and notable native species including eel, bullies, galaxid fish and koura.

Ecological Values

Sustainability - Positive	In good vegetative condition, though with a moderate edge/compactness ratio. Key ecological processes still influence the site. Under appropriate management, it can remain resilient to existing and potential threats.
Representativeness - High	Contains a land environment type classed as 'Acutely Threatened' (LENZ F5.2b), and an ecosystem type classed as 'Chronically Threatened' (WF13: Tawa, kohekohe, rewarewa, hinau, podocarp forest. Over 83% of this forest type has been lost in Taranaki and

remnant areas remain under threat from introduced predators and browsers.

Rarity and Distinctiveness - Medium

Contains notable flora including two species of threatened rata and the 'At Risk, Declining' kingfern, and the 'Regionally Distinctive' jointed fern. May provide habitat for other notable fauna such as reptiles, fish and invertebrates.

Ecological Context - Medium

The site is of a threatened land environment and ecosystem type, and provides important 'stepping stone' habitat between near-by forest fragments in a landscape.

Other Management Issues

Habitat Modification - Low

Covenanted with a QEII National Trust conservation covenant.

Herbivores - Medium

There are no browsing ungulate species at the site or near-by on the Taranaki ring plain. While the site is within the possum self-help programme area, a residual possum population will continue to present a low level but constant threat to site flora.

Possum Self-help

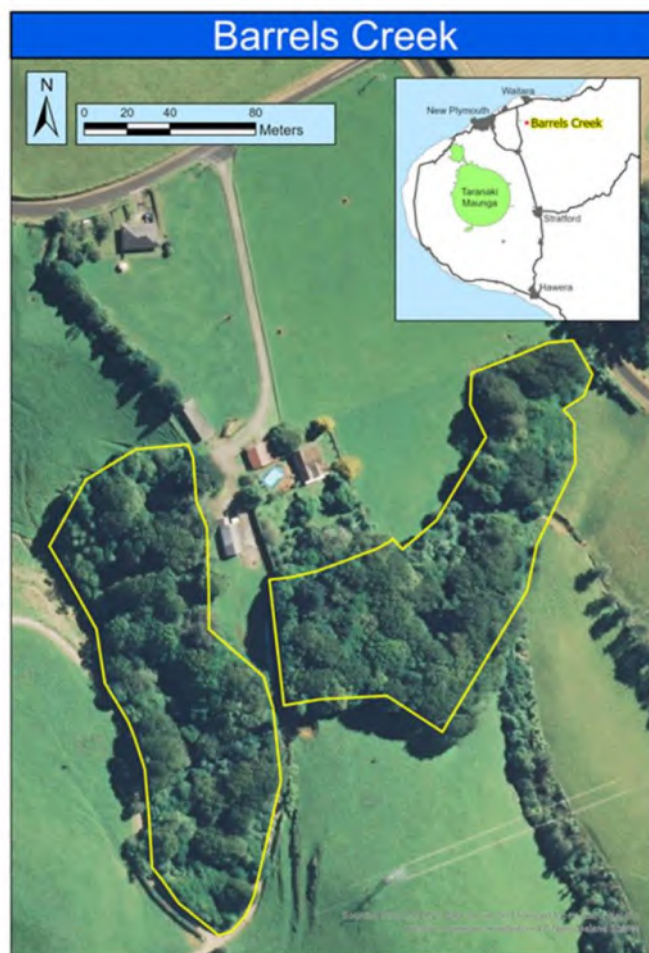
The site is within the possum self-help programme area, in the Inglewood North block.

Predators - High

Native fauna, invertebrates and fish would benefit from control of rodents, possums, hedgehogs, mustelids and feral cats.

Weeds - High

The ground cover plant *Tradescantia* is presenting a major threat to the ecosystem in the eastern forest fragment. There are a range of other pest plants present across both fragments, though these could be relatively easily addressed.



Morrison's Bush (QEII 5-06-358)

At a glance

TRC Reference: BD/9504	LENZ:	F5.2c Acutely threatened
Ecological District: Manawatu Plains	National:	Priority 1 – Threatened Land Environment
Land Tenure: Private		Priority 4 – Threatened Species
Area(ha): 2.49	Regional:	Potential KNE
GPS: 1731105X & 5596722Y	Regional	At risk 20-30% left
	Ecosystem Loss:	Acutely Threatened <10% left
Habitat: Wetland	Protection Status:	QEII Covenant
Bioclimatic Zone: Semi-Coastal	Catchment:	Whenuakura (342)
Ecosystem Type: MF7.3: Tawa, pukatea, podocarp forest		
WF8: Kahikatea, pukatea forest		

General Description

Morrison's bush remnant consists of a 2.49ha semi-coastal forest dominated by karaka. Forest remnants like this are under-represented in Taranaki owing to widespread clearance for agriculture and urban development. The site lies within the Whenuakura River catchment within the Manawatu Plains Ecological district. Morrison's Bush is in close proximity to Whenuakura Estuary, another Key Native Ecosystem, and provides connectivity to the few remaining fragmented forest remnants within the area.

Ecological Features

Flora

The forest canopy is dominated by karaka with the occasional tawa. The understory is mainly kawakawa, hangehange and karamu with few ferns, grasses and seedlings covering the ground. Recent myrtle rust threats have elevated potentially vulnerable native flora species to 'Threatened' status. Notably, one these new threatened species, white rata, is present at the site. Two 'Regionally Distinctive' species are present at the site; Ngaio, in abundance, and Coastal Tree Daisy which occurs naturally just outside the fenced area, and has also been planted inside the KNE.

Fauna

Native birds present include kereru, tui, silvereye, grey warbler, fantail, harrier and kingfisher. There is good habitat for native reptiles including dense forest canopy, loose bark and logs on the forest floor. The landowners have seen reptiles near the site, species are yet to be identified but may be notable. Koura are also present at the site.

Ecological Values

Ecological Context - Low	Sparse, fragmented remnants of native vegetation remains in the area, other than Whenuakura Estuary, and unprotected tracts of forest on private land.
Representativeness - High	Contains indigenous vegetation on an 'Acutely Threatened' (F5.2c) land environment. Less than 10% 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 ecosystems considered 'Acutely Threatened' (WF8: Kahikatea, pukatea forest) and 'At Risk' (MF7.3: Tawa, Pukatea, podocarp forest).
Rarity and Distinctiveness - Medium	Contains one newly listed 'Threatened' flora species due to potential vulnerability to myrtle rust (white rata). Two Regionally

Sustainability - Positive

Distinctive species; Ngaio and Coastal Tree Daisy. Also likely to contain notable fauna species including reptiles and invertebrates. 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 - Medium

Original values of the site will have been altered due to historical drainage. Although the habitat is vulnerable to modification there are no immediate threats.

Herbivores - Low

Fencing around the sites are fully stock proof, therefore threats from grazing animals are low.

Possum Self-help

The site is within the Possum Self - help area and receives occasional control.

Predators - Medium

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

Weed Control

Occasional pest plant control has been carried out with help from the QEII Trust.

Weeds - High

Shrub weeds, climbers and spreading ground cover weeds pose the biggest threat to the site.

