

Lake Herengawe (and margins)

At a glance (last updated: February 2010)			
TRC reference:	RMP 2322	National priorities:	1, 2, 4
Other reference:	SSBI R22/H001	Ecological district:	Manawatu
Land tenure:	Private	LENZ environment:	A5.3a (14.7 ha)
GPS:	1740838E – 5594100N		C2.1a (4.7 ha)
			C3.2d (5.0 ha)
		F5.2c (9.1 ha)	
Area:	33.5 ha	Protection status:	B, C

Location

Lake Herengawe (and margins) are located on privately owned land, 3.5 km south of Waverley near the Lower Herengawe Road and Ihupuku Road junction. The site lies in the Manawatu Ecological District.

General description

Lake Herengawe (and margins) cover 33.5 hectares, of which almost 50% is open water (lacustrine wetland) with the remaining area being lowland swamp (palustrine). The site is highly modified with pasture to the edge in most places.

Lake Herengawe is ecologically important in that it is one of a series of southern coastal dune lakes. Dune lakes are an 'originally rare' ecosystem (and found in only three countries throughout the world).

The site is interconnected with other nearby Key Native Ecosystems, including Lake Okoia, Lake Oturi, Ihupuku Swamp and Lake Waiau.

Ecological features

Vegetation

Remnant indigenous vegetation consists predominantly of raupo (*Typha orientalis*), sedges (*Carex* spp), harakeke/ flax (*Phormium tenax*) and toe toe (*Cortaderia fulvida*). Scattered indigenous trees are also present including cabbage trees (*Cordyline australis*).

Fauna

Lake Herengawe (and margins) provide an important habitat for a number of indigenous bird species including Australasian bittern (*Botaurus poiciloptilus*), which is identified as 'Acutely Threatened (Nationally Endangered)' and spotless crane (*Porzana tabuensis plumbea*), and fernbird (*Bowdleria punctata*), which are identified as being 'At Risk (Sparse)' and are particularly uncommon in the Taranaki region.

The little black shag (*Phalacrocorax sulcirostris*) and New Zealand dabchick (*Poliocephalus rufopectus*), both of which are identified as 'At Risk (Sparse)' are also present.

Other birds present or which visit the site include the little shag (*Phalacrocorax melanoleucos*), hybrid grey and mallard ducks¹, paradise shelduck (*Tadorna variegata*), pukeko (*Porphyrio porphyrio melanotus*), welcome swallow (*Hirundo ahitica*), black swan (*Cygnus atratus*), southern black-backed gull (*Larus dominicanus*), yellowhammer (*Emberiza citronella*), chaffinch (*Fringilla coelebs*), starling (*Sturnus vulgaris*) and Australasian harrier (*Circus approximans*).

Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Habitat for the 'Acutely Threatened' Australasian bittern and regionally distinctive spotless crane and fernbird.
Representativeness	High	Remnant indigenous vegetation on A5.3a, C2.1a, C3.2d and F5.2c – all 'Acutely Threatened' LENZ environments.
Ecological context	High	One of a series of southern coastal dune lakes that together provide one of Taranaki's most significant habitats for the 'Acutely Threatened' Australasian bittern. Vegetation associated with lake margins are an 'originally rare' ecosystem type.
Sustainability	Positive	Key ecological processes still influence the site. Under appropriate management, it can remain resilient to existing or potential threats.

Other values

Lake Herengawe has recreational values. Public usage includes fishing, boating, and duck hunting.

¹ Pure grey ducks are listed as Acutely Threatened. However, interbreeding between the native grey and the introduced mallard means that few pure grey ducks remain.

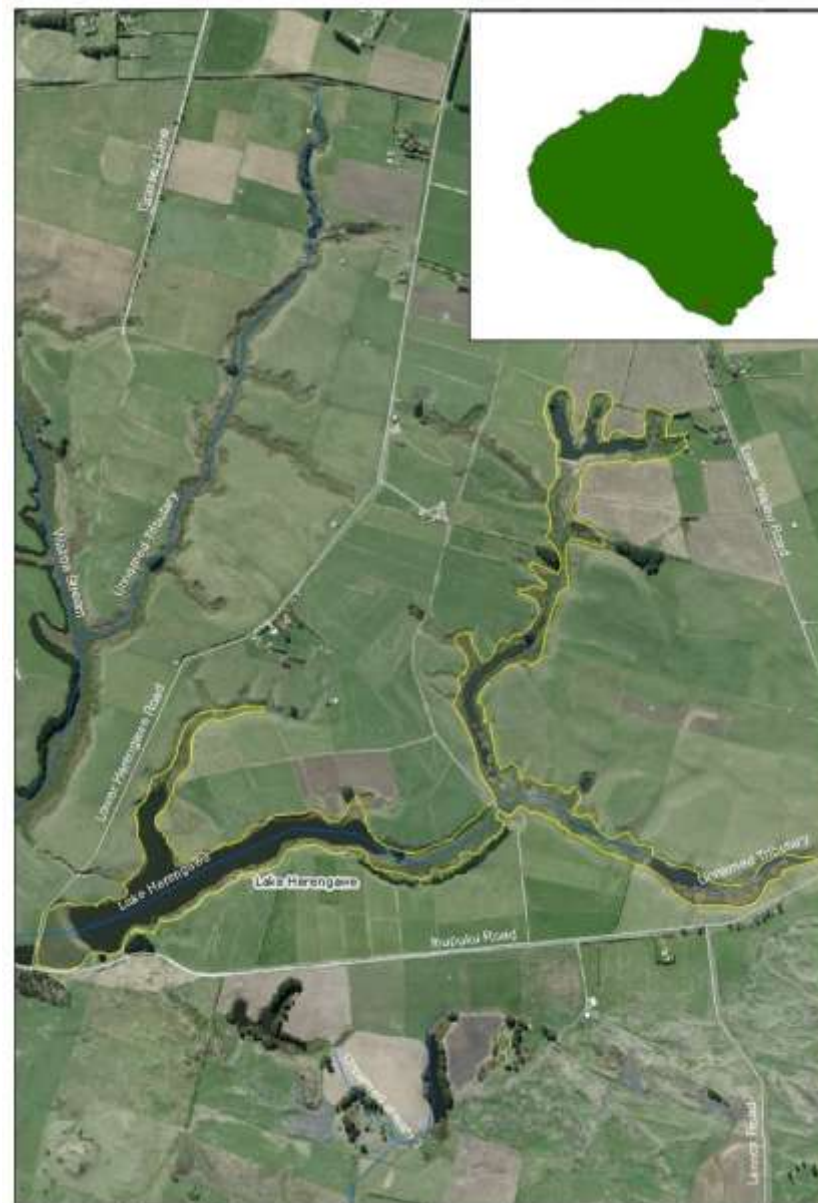
Management threats and response

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

Threats to ecological values	Level of risk	Comment
Invasive animals	Medium to high	Possums, cats, hares, mustelids, hedgehogs, and rats
Weeds	Low to medium	Potential for introduction of aquatic weeds by recreational boating
Habitat modification	Medium	The lake is not completely fenced, and grazing to the lake edge causes pugging of the lake margin

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

Site protection	Yes/No	Description
A Public ownership or formal agreement	No	
B Regulatory protection by local government	Yes	General regional or district rules might apply for activities impacting on the Lake
C Active protection	Yes	Some riparian margins fenced and replanted



Te Kiri Bush

At a glance (last updated: February 2012)		
TRC reference:		Ecological district: Egmont
Other reference: QEII Covenant: 5/6/324		LENZ environment: C1.3a (4.06 ha) F5.2a (0.7 ha)
Land tenure: Private		Protection status: A, B, C
GPS: E 1682866 N 5635044		Area: 4.76 ha

Location

The Te Kiri Bush QEII covenant is located on private land off Eltham Road, approximately 1.5 kilometres northwest of Te Kiri in south Taranaki.

General description

The Te Kiri Bush covenant covers 4.76 ha and is made up of a compact, roughly oval forest remnant, which is generally in very good condition. The main forest is dominated by tawa, pukatea and kahikatea with a good understory of saplings, seedlings and ferns. Occasional semi coastal species (kohekohe and kawakawa) are also present within the forest.

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

Ecological features

Vegetation

The main forest canopy is dominated by tawa (*Beilschmiedia tawa*), pukatea (*Laurelia novae-zelandiae*) and kahikatea (*Dacrycarpus dacrydioides*). The forest understory is in good condition since the exclusion of stock and includes young kohekohe (*Dysoxylum spectabile*), kawakawa (*Macropiper excelsum*), small leaved milk trees (*Streblus heterophyllus*), climbing rata (*Metrosideros diffusa*, *M. fulgens*, *M. perforata*), kiekie (*Freycinetia baueriana* subsp. *Banksii*) and abundant *Asplenium* and *Blechnum* ferns.

Fauna

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

Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	Low	Not known to contain any threatened species or species uncommon to Taranaki.
Representativeness	High	Contains indigenous vegetation on 'Acutely Threatened' LENZ environments (C1.3a 4.06 ha, F5.2a 0.7 ha).
Ecological context	High	An important example of native forest in an area on the ring plain where forest remnants of this type are rare.
Sustainability	Positive	Key ecological processes still influence the site and with appropriate management, it can remain resilient to existing or potential threats. The site has the additional benefit of being formally protected.

Threats to ecological values	Potential threat	Comment
Pest animals	Medium to High	Possums, cats, mustelids, hedgehogs and rats.
Weeds	High	Japanese honeysuckle, pampas, barberry, blackberry.
Habitat modification	High	Currently well fenced and stock are excluded from the area.

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

Site protection	Yes/No	Description
A Public ownership or formal agreement	Yes	Covered by a QEII covenant.
B Regulatory protection by local government	Yes	General regional or district rules might apply.
C Active protection	Yes	Completely fenced. Part of the Self-help Possum Control Programme.



Te Wairua o te kohu

At a glance (last updated: November 2012)			
TRC reference:		Ecological district:	North Taranaki
Other reference:	QEII Covenant: 5/6/345	LENZ environment:	F7.2a 0.8 ha F1.1b 135.6 ha F1.1c 0.8 ha F1.1d 129.1 ha
Land tenure:	Private	Protection status:	A, B, C
GPS:	E 1743882 N 5676263	Area:	269.75 ha

Location

The Te Wairua o te kohu QEII covenant is located on private land 2.5kms south east of the Rerekino road end and approximately 15kms south east of Uruti in North Taranaki.

General description

The QEII covenanted area consists of typical North Taranaki dissected hill country with steep ridges and spurs. The main gully and stream within the covenanted area is a tributary of the Mangaowata stream in the upper Waitara River catchment, and the site is bordered by the Mangaowata Stream on the southern margin.

The ecosystem consists mainly of cut over native forest and more than half of the covenant is directly adjacent to and contiguous with the DOC administered Makino Conservation Area.

Ecological features

Flora

The covenanted area of forest consists primarily of tawa (*Beilschmiedia tawa*) with a mix of other species including rimu (*Dacrydium cupressinum*), maire (*Nestegis cunninghamii* and *N. montana*), kahikatea (*Dacrycarpus dacrydioides*), matai (*Prumnopitys taxifolia*), pukatea (*Laurelia novae-zelandiae*), totara (*Podocarpus totara*) and rewarewa (*Knightia excelsa*).

Fauna

Notable fauna within the covenant include the 'Nationally Vulnerable' Western North Island brown kiwi (*Apteryx mantelli*), the "Threatened, Nationally Vulnerable, Regionally Distinctive" New Zealand falcon (*Falco novaeseelandiae*) and the 'At Risk' long-tailed cuckoo (*Eudynamys taitensis*). A number of other threatened or at risk fauna species have also been recorded in the adjacent Makino conservation area and several of these are also likely to be present in this covenanted area, e.g., the North Island kaka, kakariki (yellow crowned parakeet) and North Island rifleman.

The covenanted area also contains populations of other forest birds including the North Island robin (*Petroica australis longipes*), New Zealand pigeon (*Hemiphaga novaeseelandiae*), grey warbler (*Gerygone igata*), fantail (*Rhipidura fuliginosa*), bell bird (*Anthornis melanura*) and tui (*Prothemadera novaeseelandiae*).

Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Contains threatened and at risk species such as the Nationally Vulnerable Western North Island brown kiwi (<i>Apteryx mantelli</i>), New Zealand falcon (<i>Falco novaeseelandiae</i>) and the at risk long-tailed cuckoo (<i>Eudynamys taitensis</i>)
Representativeness	Low	Contains small areas of indigenous vegetation on 'At Risk' LENZ environments (F7.2a 0.8 ha, F1.1c 0.8 ha). The remaining greater areas are 'Not Threatened' LENZ environments.
Ecological context	High	Provides additional habitat and greater connectivity with the Makino Conservation Area and other remnant habitats in this area.
Sustainability	Positive	Key ecological processes still influence the site and with appropriate management, it can remain resilient to existing or potential threats. The site has the additional benefit of being formally protected.

Threats to ecological values	Potential threat	Comment
Pest animals	High	Possums, cats, mustelids, hedgehogs, rodents, goats and pigs.
Weeds	Low	Occasional pampas. Pasture weeds only common on the fence line, slips and exposed ridges.
Habitat modification	Medium	Currently well fenced and stock are excluded from the area. QEII covenant conditions apply.

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

Site protection	Yes/No	Description
A Public ownership or formal agreement	Yes	Covered by a QEII covenant.
B Regulatory protection by local government	Yes	General regional or district rules might apply.
C Active protection	Yes	Boundary along the pasture is completely fenced and stock proof. The owner actively undertakes pest animal control (goats, possums, mustelids and rats) at varying levels of control.

