# Waiwiri wetlands QEII covenants

At a glance (last updated: July 2011)					
TRC reference:		Ecological district:	Matemateonga		
Other reference:	QEII Covenants: 5/6/224, 5/6/277, 5/6/286	LENZ environment:	F1.1b (3.1ha) H3.1b (0.8ha)		
Land tenure:	Private	Protection status:	A, B, C		
GPS:	E 1722072 N 5648595	Area:	3.9 ha		

### Location

The Waiwiri wetlands QEII covenants are located on private land off Waiwiri Road, approximately 4 kilometres north east of Toko in east Taranaki.

## General description

The Waiwiri wetlands QEII covenants cover 3.9 ha in total. The area is made up of three small gully systems. Five man-made open water ponds have been created on the valley floors to enhance wetland values at the site. Only small areas of the original native vegetation present in the gullies remain however additional buffer planting around the wetlands and including an adjoining hillside has been undertaken to increase wetland values.

Threatened and regionally distinctive wildlife such as spotless crake, New Zealand dabchick and North Island fernbird have been quick to colonise or visit the wetlands.

## **Ecological features**

#### Vegetation

Flora species naturally found in the covenants include: raupo (*Typha orientalis*), lacebark (*Hoheria sexstylosa*), carex spp, swamp coprosma (*coprosma tenuicaulis*), New Zealand fuchsia (*Fuchsia excorticate*), and pohuehue (*Muehlenbeckia australis*).

Both native and introduced vegetation species have been planted at this site to enhance the habitat which include: karamu (*Coprosma robusta*), wineberry (*Aristotelia serrata*), cabbage tree (*Cordyline australis*), flax (*Phormium tenax*), koromiko (*Hebe stricta*), purei (*Carex secta*), white pine (*Dacrycarpus dacrydiodes*), lemonwood (*Pittosporum eugeinoides*), five finger (*Pseudopanax arboreus*), kowhai (*Sophora microphylla*), toetoe (*Cortaderia fulvida*), and lacebark (*Hoheria sexstylosa*). Given the habitat and sustained possum control programme, this site would be suitable for the reintroduction of threatened or regionally rare flora species that should have been present in the past (e.g. Kirk's tree daisy (*B.kirkii*), *Dactylanthus taylorii*, and small flowered mistletoe (*Ileostylus micrantus*).

#### Fauna

Since the creation of the open water ponds and the enhancementl planting, several important fauna species have arrived as visitors or occupants in the variety of new habitats at this site.

Native bird species present include: spotless crake (*Porzana tabuensis*) ('At Risk' and 'Regionally Distinctive'), New Zealand dabchick (*Poliocephalus rufopectus*) (Nationally Vulnerable), North Island fernbird (*Bowdleria punctata*) (At Risk, Declining), grey duck (*Anas superciliosa superciliosa*) (Nationally Critical), black shag (*Phalacrocorax carbo novaehollandiae*) (At Risk, Naturally Uncommon), and little shag (*Phalacrocorax melanoleucos*) (At Risk, Naturally Uncommon).

More common bird species include: harrier hawk (*Circus approximans*), pukeko (*Porphyrio porphyrio*), paradise shellduck (*Tadorna variegate*), fantail (*Rhipidura fuliginosa placabilis*), and silvereye (*Zosterops lateralis*).

This habitat is also noted for having a stunning build up of welcome swallow (*Hirundo neoxena*). In what appears to be a seasonal migration, in late autumn up to 500 birds roost in the raupo.

Given the habitat, the ability to manage fish access and the intensive predator control programme, there is also good potential for reintroducing threatened or rare fauna species such as goldstripe gecko (*Hoplodactylus chrysosireticus*) and brown mudfish (*Neochanna apoda*) to this site.

# **Ecological values**

Ecologicalvalues	Rank	Comment	
Rarity and distinctiveness	High	Contains or is visited by "Threatened" New Zealand dabchick, and the 'At Risk' and 'Regionally Distinctive' spotless crake and North Island fembird.	
Representativeness	Medium	Containsa small area (0.8ha) of 'Acutely Threatened' (H.3.1b) LENZ environment.	
Ecological context	Medium	Part of an important sequence of increasingly rare small wetland systems in the eastern hill country area.	
Sustainability	Positive	Key ecological processes still influence the site and with appropriate management, it can remain resilient to existing or potential threats. Highly motivated and capable landowner. The site has the additional benefit of being formally protected.	

# Management threats and response

Potential threats to the sustainability of Waiwiri Wetland QEII Covenant's ecological values are as follows:

Threats to ecological values	Potential threat	Comment	
Pest animals	Medium to High	Possums, rats, stoats, ferrets, weasels, hedgehogs and cats will be present at varying densities. A rigorous, effective and sustained pest management programme is currently in place.	
Weeds	Medium	Only a few weed species are currently present (Himalayan honeysuckle, blackberry) and are the target of an ongoing weed control programme. The risk of greater weed invasion remains present	
Habitat modification	Medium to high	The majority of the site is recovering since being fenced and stock excluded from the area. Open water levels vary on a seasonal basis although appears to be on a sustainable basis.	

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

Site protection Ye		Yes/No	Description
Α	Public ownership or formal agreement	Yes	Covered by three QEII covenants.
В	Regulatory protection by local government	Yes	General regional or district rules might apply.
С	Active protection	Yes	Completely fenced, part of the Self-help Possum Control Programme, active predator control programme in place and part of the on farm weed management programme.

