

GREAT BARRIER REPORTING AREA

Great Barrier Local Board

STATE OF AUCKLAND TERRESTRIAL REPORT CARD



QUICK FACTS

THE REPORTING AREA IS APPROXIMATELY
32,000
 HECTARES IN SIZE

GREAT BARRIER ISLAND IS THE
SECOND LARGEST
POSSUM-FREE ISLAND
 IN NEW ZEALAND
 (AFTER AUCKLAND ISLAND)

GREAT BARRIER ISLAND IS ONE OF ONLY TWO AREAS IN THE WORLD IN WHICH THE 'THREATENED' TAIKO/BLACK PETREL BREEDS (THE OTHER BEING LITTLE BARRIER ISLAND)

GREAT BARRIER ISLAND IS HOME TO NEARLY
A QUARTER
 OF NEW ZEALAND'S
VASCULAR PLANT SPECIES

FOREST - LANDCOVER

E	D	C	B	A
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FOREST - NATIVE PLANTS

E	D	C	B	A
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FOREST - NATIVE BIRDS

E	D	C	B	A
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FOREST - PEST ANIMALS

E	D	C	B	A
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FOREST - WEEDS

E	D	C	B	A
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WETLANDS - CONDITION

E	D	C	B	A
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WETLANDS - NATIVE PLANTS

E	D	C	B	A
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WETLANDS - NATIVE BIRDS

E	D	C	B	A
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WETLANDS - PEST ANIMALS

E	D	C	B	A
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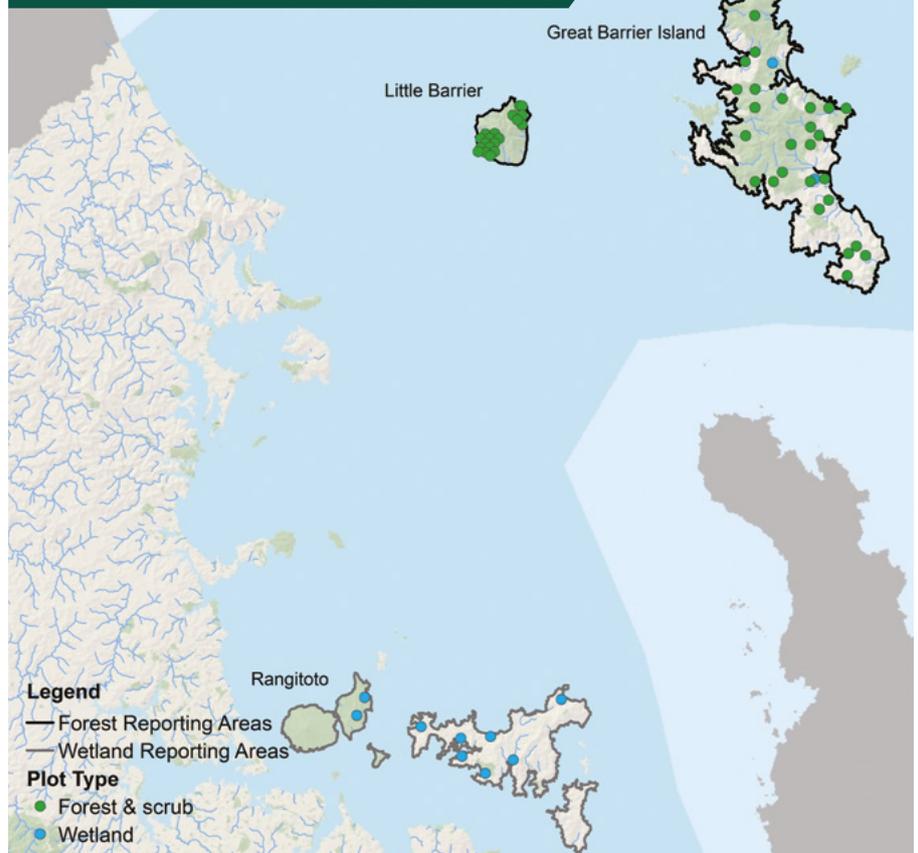
WETLANDS - WEEDS

E	D	C	B	A
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WHAT MAKES UP THIS GRADE?

Indicator grades were calculated using data collected from forest and wetland terrestrial biodiversity monitoring plots. As the full set of remeasures were only available for the wetland indicators, only the wetland grades have been updated and thus the forest grades are the same as the last 2016 report card.

MONITORING SITES - GREAT BARRIER REPORTING AREA



CURRENT ECOLOGICAL CONTEXT

The Great Barrier reporting area includes Great Barrier Island (Aotea), Little Barrier Island (Hauturu) and the Mokohinau Islands. The vegetation predominantly comprises native re-growth following logging; kanuka forest and/or manuka scrub and forest are the most common components. Not surprisingly, this local board has the lowest percentage of urban cover (approx 0.3 per cent). Most of the remaining land cover is characterised by pasture, mainly on low-lying, flat land surrounding the lower reaches of the major rivers.

Most of Hauturu and some of the Mokohinau Islands have remained unmodified by human activity associated with farming and resource

extraction by European settlers. However, much of Great Barrier Island has been significantly affected from burning and logging of forests, mining, gum digging, and draining of wetlands to create farmland.

Despite this, Great Barrier Island still supports a high diversity of native flora and fauna. The island also retains extensive freshwater wetlands, saltmarsh and dunelands, all of which are nationally uncommon habitat types. Approximately 55 per cent of the remaining native vegetation remnants on Great Barrier Island are in protected areas.

HIGHLIGHTS

Kaitoke Swamp covers approximately 320 hectares and drains northeast to the sea near Claris, via the Kaitoke Stream. The wetland is an old infilled harbour; the research of Horrocks and co-workers has shown that c. 7300 years ago Kaitoke was an estuary with tidal flats and mangroves, but by c. 4500 years ago the freshwater conditions that we see today had developed. Kaitoke is the most ecologically significant and largest freshwater wetland on Aotea/Great Barrier Island. While most people refer to this feature as Kaitoke Swamp, much of the wetland actually comprises fen-like vegetation, although there are pockets of swamp. Fens have a predominantly peat substrate, like Kaitoke, and are fed by both rain and groundwater. The water table is typically just below the peat surface with small but noticeable fluctuations throughout the year.



Kaitoke swamp includes a range of habitats and is also an important site for breeding and roosting waterbirds. The swamp is an important link in the almost continuous sequence of indigenous ecosystems extending from the summit of Hirakimata/Mt Hobson to the dunelands and saltmarsh at Kaitoke Beach. Kaitoke Swamp provides habitat for threatened or unusual bird species such as pāteke/brown teal, matuku hūrepo/Australasian bittern, mioweka/banded rail, and pūweto/spotless crane. Some of the largest global populations of mātātā/North Island fernbird are also found within the mānuka dominated wetland ecosystems along the margins and in the upper reaches of Kaitoke Swamp.

Rutherford (1998) identified six broad indigenous vegetation types within the wider wetland, and these different plant communities create a zonation of ecosystems from hot springs and freshwater fen to saltmarsh and tidal mangroves. They include raupō and/or kutakuta in areas of deeper water and tī kōuka and/or harakeke emergent above native sedgeland in areas of permanent shallow water. Both of these wetland types are quite 'swampy' in character. The extensive area of fen-like vegetation in the core of the wetland is dominated by tussock swamp twig-rush sedgeland, tangle fern fernland and sedgeland, and mānuka scrub and sedgeland on dryer sites. Estuarine wetlands, characterised by mākaka/marsh ribbonwood and oioi, are found where saltwater intrusion extends up Kaitoke Stream.

FIND OUT MORE

This report card is part of a series prepared by the Auckland Council's Research and Evaluation Unit, which undertakes monitoring and research to provide information and evidence to inform the council's activities and reporting. More report cards can be found at: aucklandcouncil.govt.nz/environment. The report card series includes reporting on freshwater, terrestrial, marine, air, soil, capacity for growth, demographics and quality of life.

For more information: e-mail rimu@aucklandcouncil.govt.nz or call us on 09 301 0101.

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