

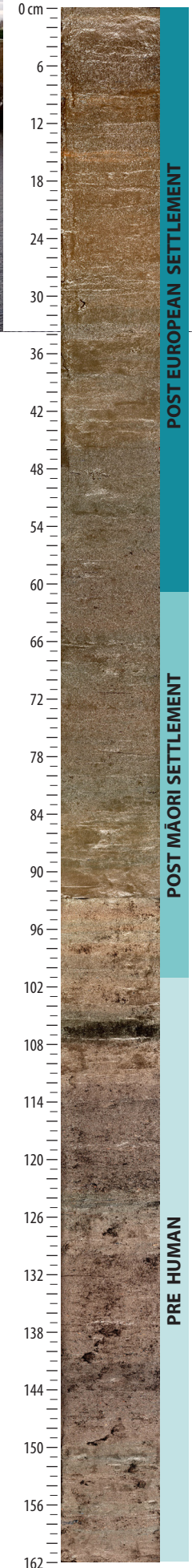


Lakes380

Our lakes' health past, present, future
Me hoki whakamuri,
kia haere whakamua



Top of core - 2019



LAKE WIRITOA

Region: Manawatū Whanganui **Location:** Kaitoke **Coords:** 39° 58' 28" S 175° 5' 21" E **Depth:** 19 m

Lake Wiritoa is part of a group of coastal lakes located south of the Whanganui River. Sitting in 5 ha of parkland within an agricultural catchment, it has high recreational use. The water quality is poor and the lake is susceptible to cyanbacterial blooms.

Initial results from the sediment core suggest that prior to human arrival dense native forest dominated by podocarps (particularly rimu and mataī) surrounded Lake Wiritoa.

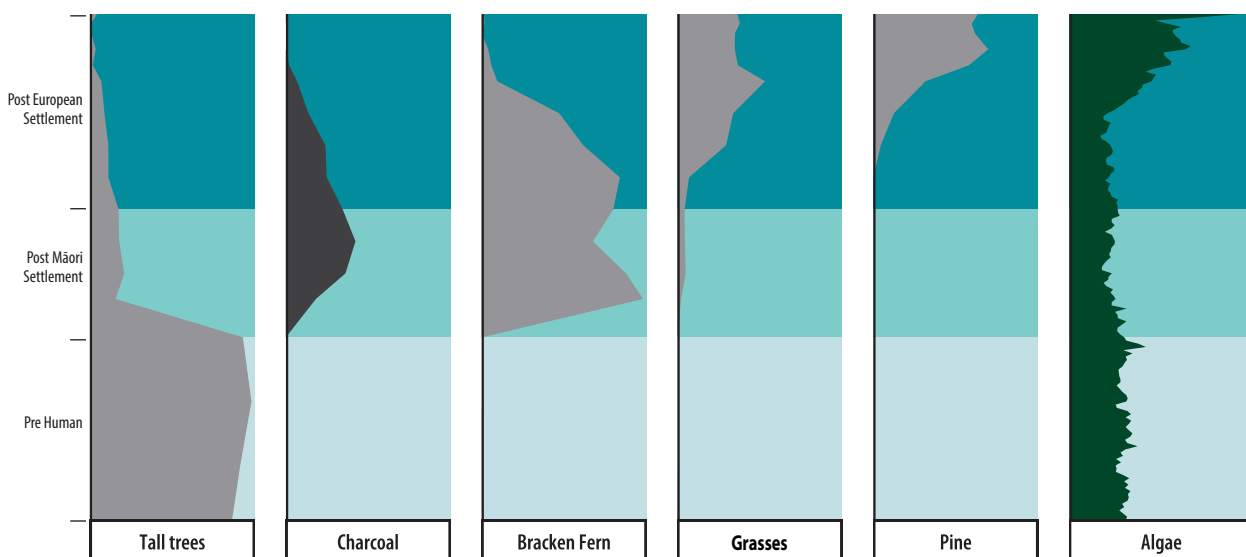
As Māori settled in the region, some forest clearance began. This is highlighted in the graphic below by a decrease in tall trees, combined with charcoal (burning) and bracken

fern pollen, which is commonly associated with landscape disturbance.

After European arrival native vegetation was replaced by pastoral lands, and non-native trees such as pines were planted in the region.

Algae have always been present in the lake, but levels have increased markedly in the last ~50 years.

POLLEN, CHARCOAL AND ALGAE LEVELS FOR THE PAST ~1200 YEARS



This graphic indicates changes in abundance of plants, charcoal or algae through time.