



Lakes380

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



LAKE WAIPOROHITA

Region: Northland **Location:** Karikari Peninsula **Coordinates:** 34° 54' 4" S 173° 20' 53" E **Depth:** 3.7 m

Lake Waiporohita is a small shallow dune lake near Tokerau Beach on Karikari Peninsula. The lake has no inflows or outflow. It is completely fenced, and sits within a pastoral dominated catchment.

Initial results from the sediment core suggest that prior to human arrival Lake Waiporohita was surrounded by dense native forest. This forest was initially dominated by beech trees, but over time podocarps (mātai and rimu in particular), kauri and kawaka became more abundant.

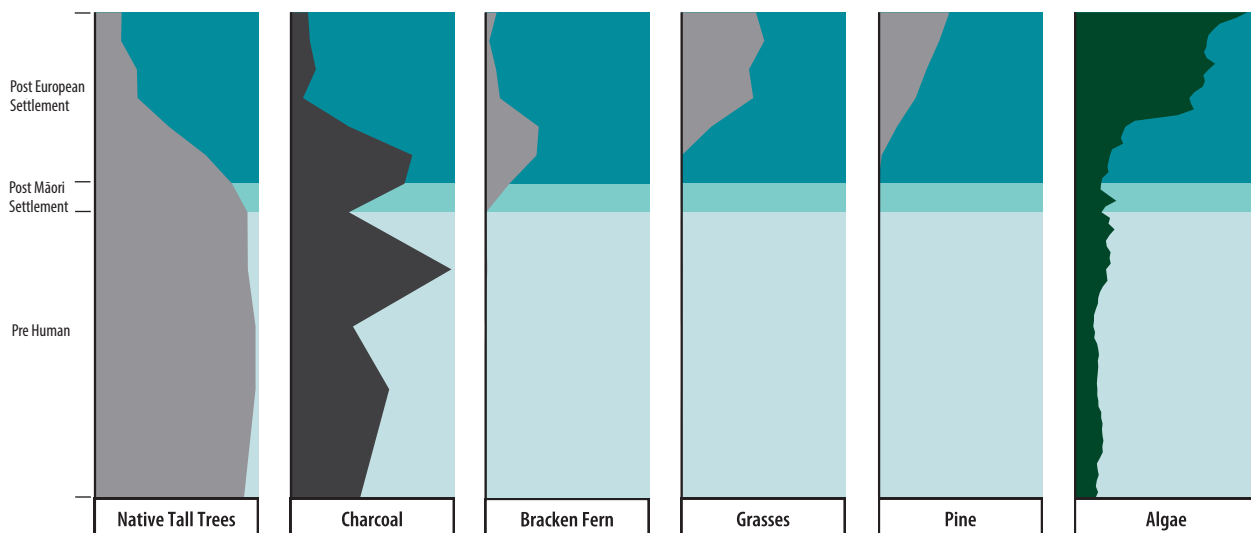
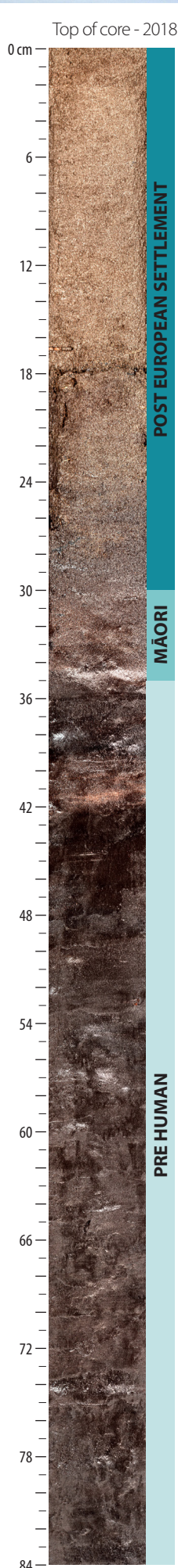
After Māori settlement, some vegetation clearance began. This is highlighted in the graphic below by charcoal (fire) and increased

bracken fern, commonly associated with landscape modification.

Post European arrival clearance of native forest increased. Pastoral lands were established and non native trees such as pine were planted in the region.

The levels of algae in the lake have increased markedly over the last about 100 years and the lake now has poor water quality.

POLLEN, CHARCOAL AND ALGAE LEVELS FOR THE PAST ~3000 YEARS



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