

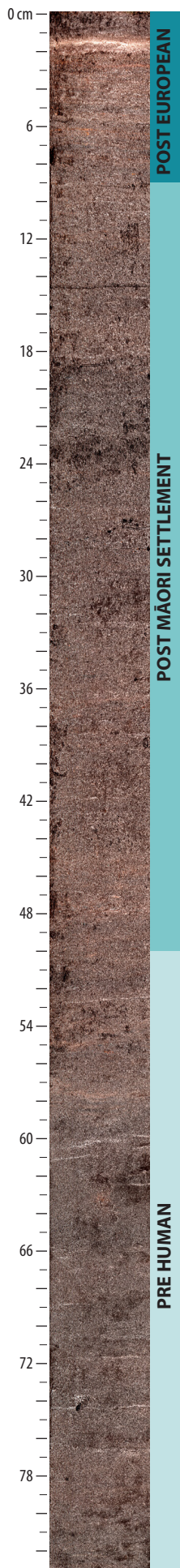


Lakes380

Our lakes' health past, present, future

Me hoki whakamuri, kia haere whakamua

Top of core - 2018



# TE KAHIKA

**Region:** Northland **Location:** Te Paki **Coordinates:** 34° 37' 25" S 173° 0' 3" E **Depth:** 10.8 m

Lake Te Kahika is a unique dune lake, which is very acidic with a pH of about 4. This prevents aquatic plants growing in it. The lake is situated in a pine plantation that has recently been harvested.

Initial results from the sediment core suggest that prior to human settlement Lake Te Kahika was surrounded by native forest abundant in rimu and kauri.

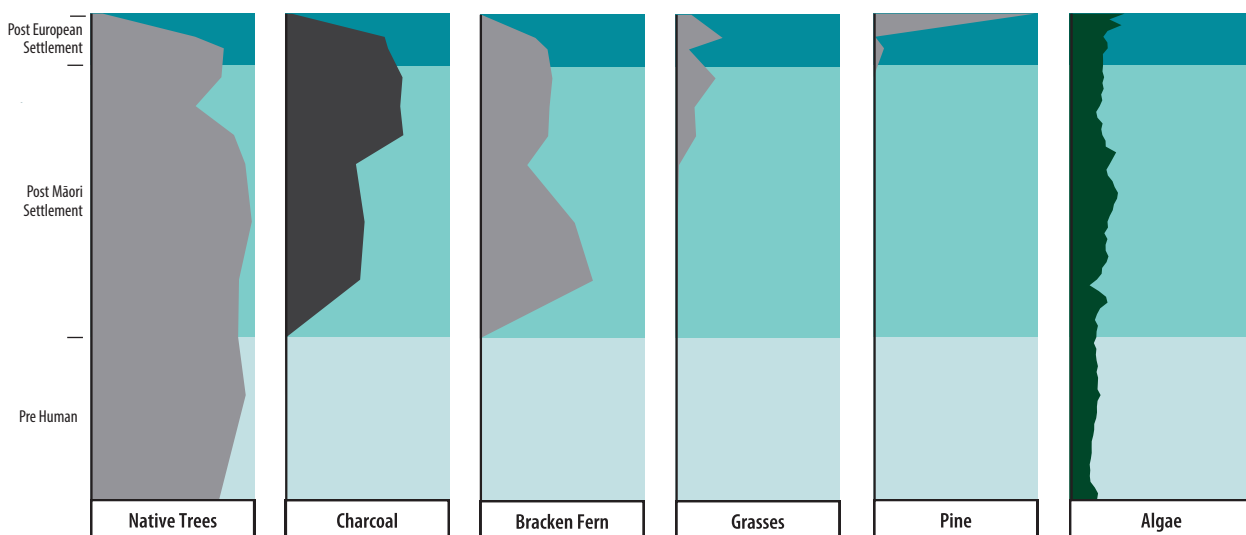
Post Māori settlement some vegetation disturbance began. This is highlighted in the graphic below by charcoal (fire) and an increase in bracken fern, often associated with landscape modification.

Native trees remained prevalent in the region, in particular rimu.

Post European settlement forest clearance increased. The native trees were replaced by pine trees and grasses.

Algae have always been present in the lake at low levels but have increased slightly since humans settled in the region.

## POLLEN, CHARCOAL AND ALGAE LEVELS FOR THE PAST ~2000 YEARS



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