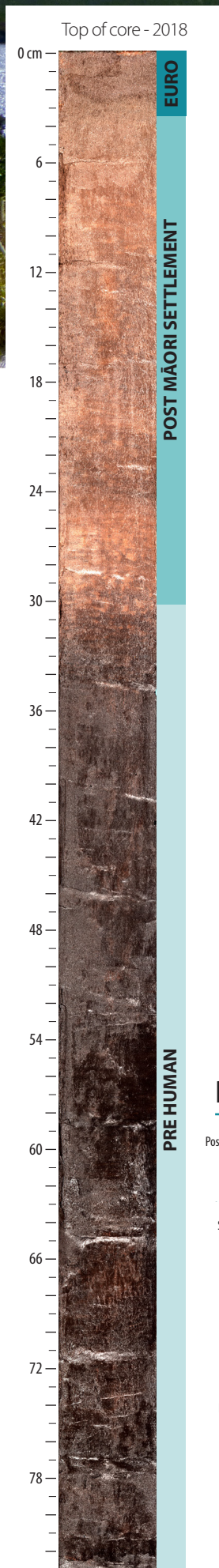




Lakes380

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



# LAKE MOREHUREHU

**Region:** Northland **Location:** Te Paki **Coordinates:** 34° 38' 31" S 172° 59' 50" E **Depth:** 14.1 m

Morehurehu is a dune lake formed when a stream was naturally dammed by wind blown sand. The lake is surrounded by pine forests and mānuka. The pine trees have been recently harvested and replanted.

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

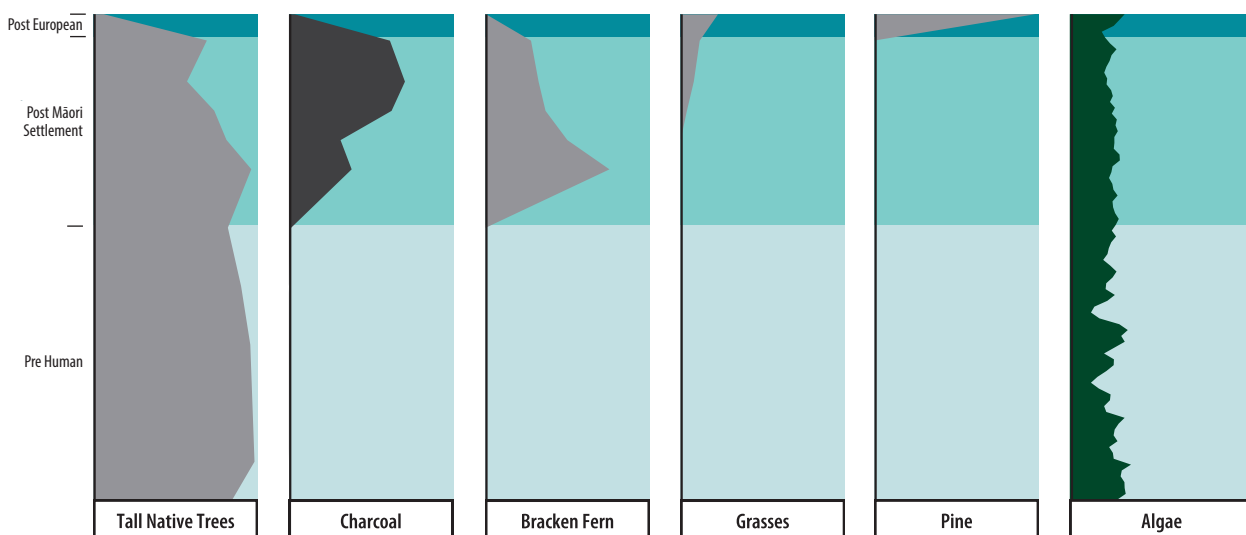
Post Māori settlement some vegetation clearance began. This is highlighted in the graphic below by charcoal (fire) and an increase in bracken fern, often associated with landscape modification.

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.

The sediment core picture shows a change from organic mud to sandy mud at about 30 cm. This is likely caused by more sand entering the lake from eroding coastal sand dunes.

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



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