



Lakes380

Our lakes' health  
past, present, future

Me hoki whakamuri,  
kia haere whakamua



# LAKE KUWAKATAI



**Region:** Auckland **Location:** Kaipara South Head **Coordinates:** 36° 31' 48" S 174° 13' 56" E **Depth:** 16 m

Lake Kuwakatai is a dune lake located on the South Head of Kaipara Harbour. Situated in a pastoral and pine dominated catchment, the lake has poor water quality.

The Lake Kuwakatai sediment core is sandy at the base. The base covers the period of the beginning of European settlement in the region. Initial results from the sediment core suggest that at this time the land around Lake Kuwakatai was dominated by bracken fern, the native shrub tutu and several varieties of fern, with a few tall native trees in the immediate catchment.

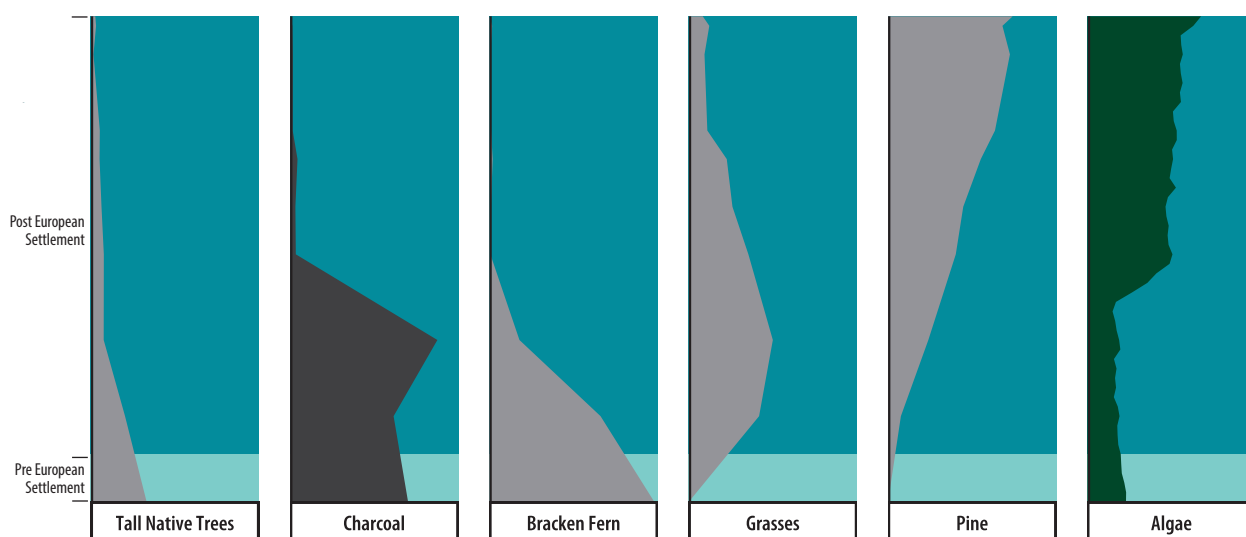
The graphic below shows high amounts of charcoal (indicating fire) and the presence of bracken fern and tutu, often associated with

vegetation modification. This suggests the vegetation on the land around the lake was experiencing significant disturbance about 250 years ago.

Post European settlement, vegetation change continued as pasture and exotic pine trees were planted in the catchment replacing most native species.

Algae have always been present in the lake and have increased in the last 50 to 100 years.

## POLLEN, CHARCOAL AND ALGAE LEVELS FOR THE PAST ~250 YEARS



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