

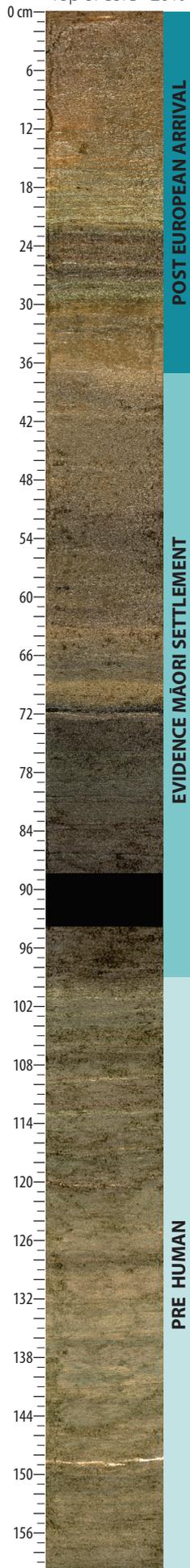


Lakes380

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



Top of core - 2019



# LAKE PUPUKE

**Region:** Auckland **Location:** North Shore

**Coordinates:** 36° 46' 48" S 174° 45' 55" E **Depth:** 57 m

Lake Pupuke is an urban lake in the Auckland suburbs of Takapuna and Milford (Auckland). The lake was formed 100,000-years ago by a volcanic eruption. No rivers or streams feed or drain this lake. Lake health has been deteriorating in recent years with increases in nutrients as well as introduced fish and plants which disturb the natural ecosystem.

The initial results from the sediment core suggest that prior to human arrival rimu-dominated podocarp and kauri forest were abundant in the region. As humans arrived some forest clearance began in the catchment. This is highlighted in the graphic to the right by the increase in charcoal (burning) and pollen from bracken fern 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. The lake is now completely surrounded by urban development. Algae have always been present in this lake and levels have not changed markedly in recent times.

## POLLEN AND CHARCOAL LEVELS FOR THE PAST ~1500 YEARS

