



Lakes380

Our lakes' health past, present, future

Me hoki whakamuri, kia haere whakamua



TE ROTO O WAIREWA

Environment Canterbury Regional Council
Kaunihera Taiao ki Waitaha

Region: Canterbury **Location:** Little River **Coordinates:** 43° 48' 0" S 172° 44' 54" E **Depth:** 4 m

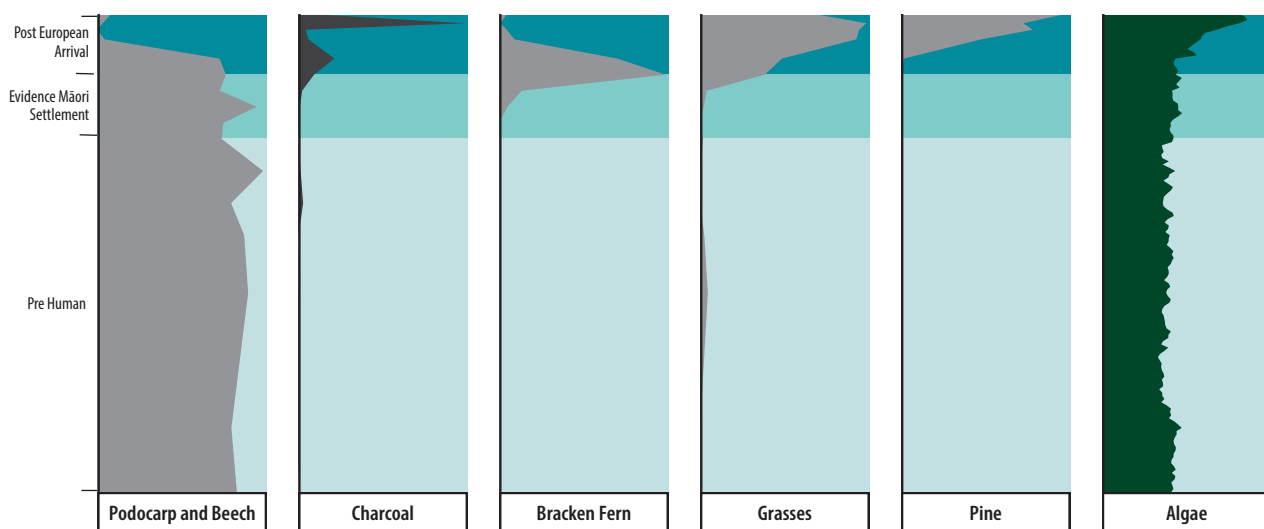
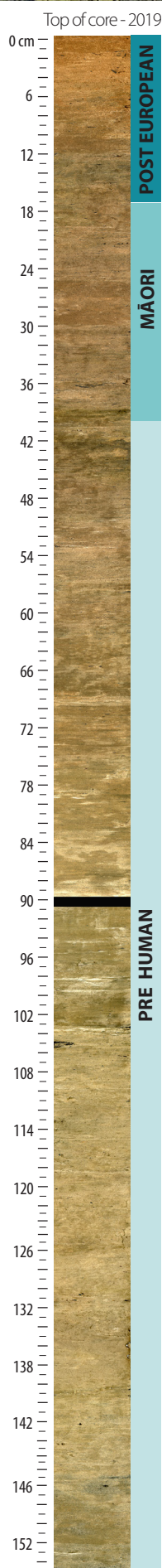
Te Roto o Wairewa (Lake Forsyth) is a large, shallow, coastal lake situated on Banks Peninsula. The lake holds high cultural significance among local Māori and is valued as a mahinga kai (food bowl). Previous work suggests that this lake was once a coastal lagoon, and likely became a brackish lake about 500 years ago.

The initial results from the sediment core suggest that prior to human arrival podocarp, in particular matai and miro, and beech forest were abundant in the region. After human arrival some vegetation clearance began. This is highlighted in the graphic below by the increase in charcoal (burning) and pollen from bracken fern, which is commonly associated

with landscape disturbance.

Post European arrival, an increase in native forest removal is observed. Native vegetation was replaced by pastoral land and non-native trees such as pine were planted in the region. There is a notable increase in algae post European arrival.

POLLEN, CHARCOAL AND ALGAE LEVELS FOR THE PAST ~2500 YEARS



The shaded area indicates the concentration of plants, charcoal or algae through time.