



Lakes380

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



# WHAKAKĪ LAKE



**Region:** Hawke's Bay **Location:** Wairoa **Coordinates:** 39°2'44"S 177°33'25"E **Depth:** 1.5 m

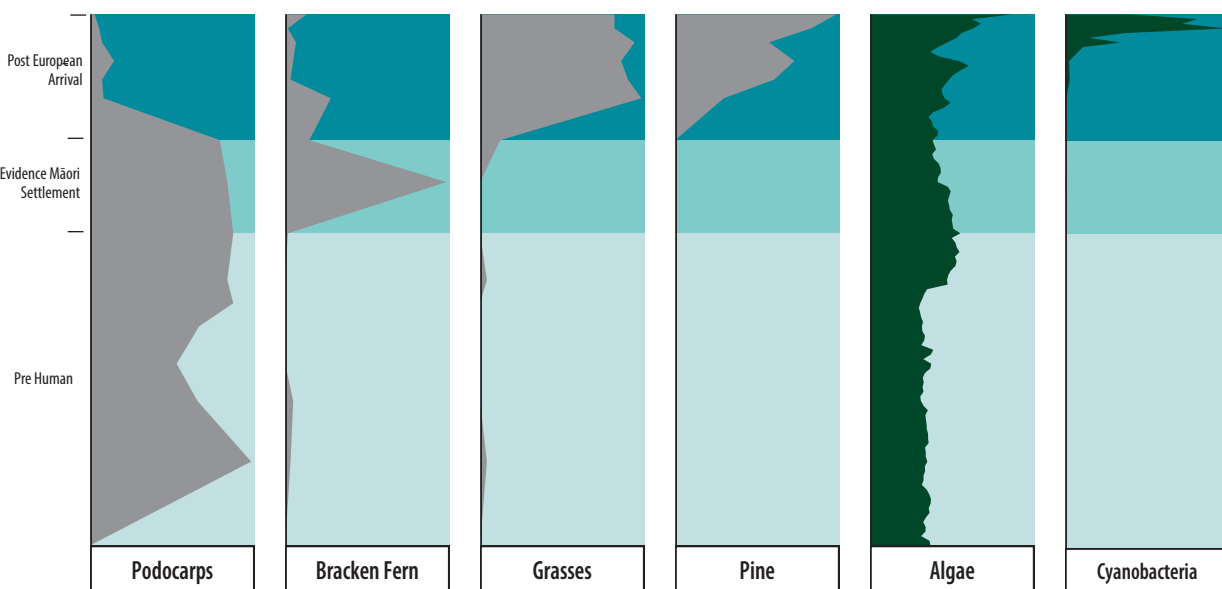
Whakakī Lake is separated from the sea by a narrow strip of sand dunes on its southern shore. Whakakī was part of a much larger 6,000 ha wetland, however, due to significant historical modifications only 10% of the original wetland area remains. The lake is in a degraded state and frequently experiences algae blooms.

The initial results from the sediment core suggest that prior to European arrival rimu and matai, forests were abundant in the region. As Māori settled some vegetation disturbance occurs. This is highlighted in the graphs below by the increase in pollen from bracken fern, which is commonly associated with landscape disturbance. Post European arrival native vegetation was replaced by pastoral land and non-native trees such as pine were planted in the region. Algal abundance

has progressively increased in the lake. The DNA data shows that bloom forming cyanobacteria have increased in abundance recently.

To assist in revitalising the lake the Whakakī Lake Trust, Hawkes Bay Regional Council, Ministry for the Environment (Freshwater Improvement Fund) and farmers are actively fencing and planting around the lake.

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



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