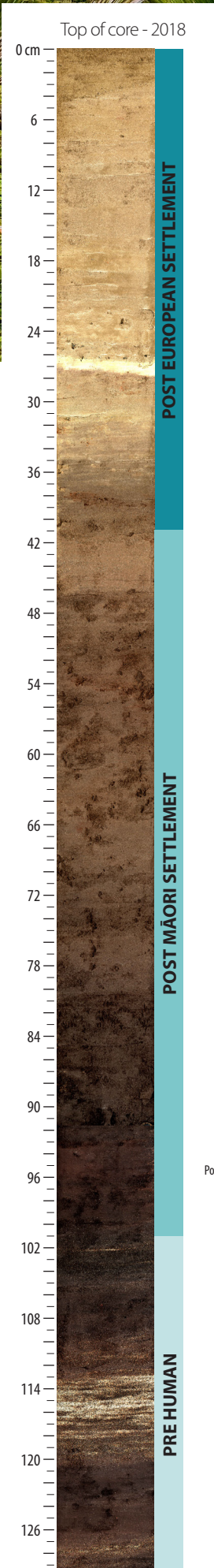




Lakes380

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



TINAWHU KAIHOKA LAKES (EAST)

Region: Tasman **Location:** Golden Bay **Coordinates:** 40° 33' 17" S 172° 36' 7" E **Depth:** 14.6 m

Tinawhu (East Kaihoka Lake) is one of Aotearoa's least modified shallow coastal lakes. It was formed as dunes advanced inland blocking a small stream. It has no permanent in- or outflows. It contains a rare landlocked population of native banded kōkopu fish.

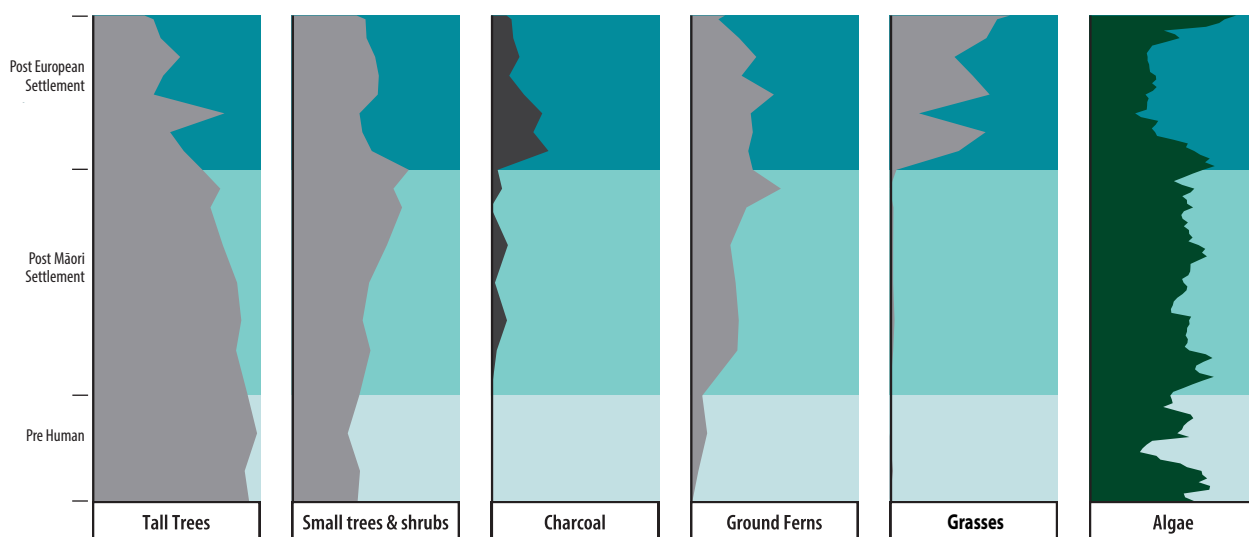
Initial results from the sediment core suggest that pre human settlement, Tinawhu was surrounded by lush native forest abundant in rimu, pohutakawa, ferns, and small trees and shrubs such as coprosma and the endemic hutu.

Post Māori settlement some vegetation disturbance occurred. This is highlighted in the graphic below by charcoal (fire) and an increase in ground ferns, while tall trees slowly decreased.

Post European settlement, removal of many of the tall trees in the region continued. While much of the lake's catchment is still in regenerating native forest, the landscape surrounding the reserve has been converted to farmland. This is reflected in the figure below by the increase in grasses.

Algae concentrations have remained relatively constant in the lake, although there has been a steady increase in the last ~50 years.

POLLEN, CHARCOAL AND ALGAE LEVELS FOR THE PAST ~1000 YEARS



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