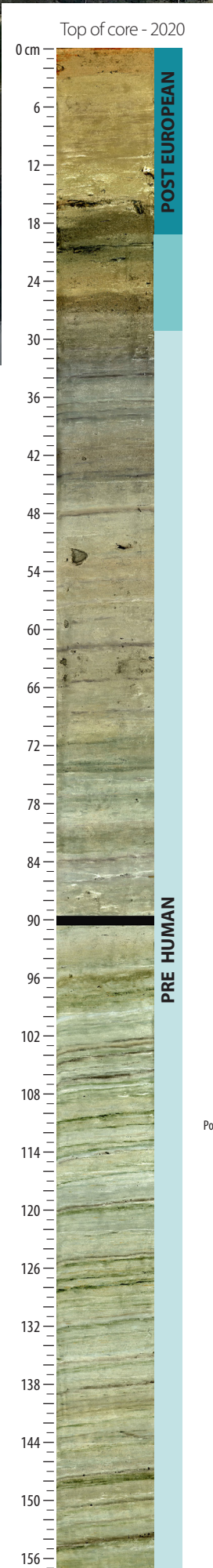




Lakes380

Our lakes' health past, present, future

Me hoki whakamuri, kia haere whakamua



LAKE ŌPŌREA/PEARSON



Region: Canterbury **Location:** Arthur's Pass **Coordinates:** 43° 6' 10" S 171° 46' 41" E **Depth:** 17 m

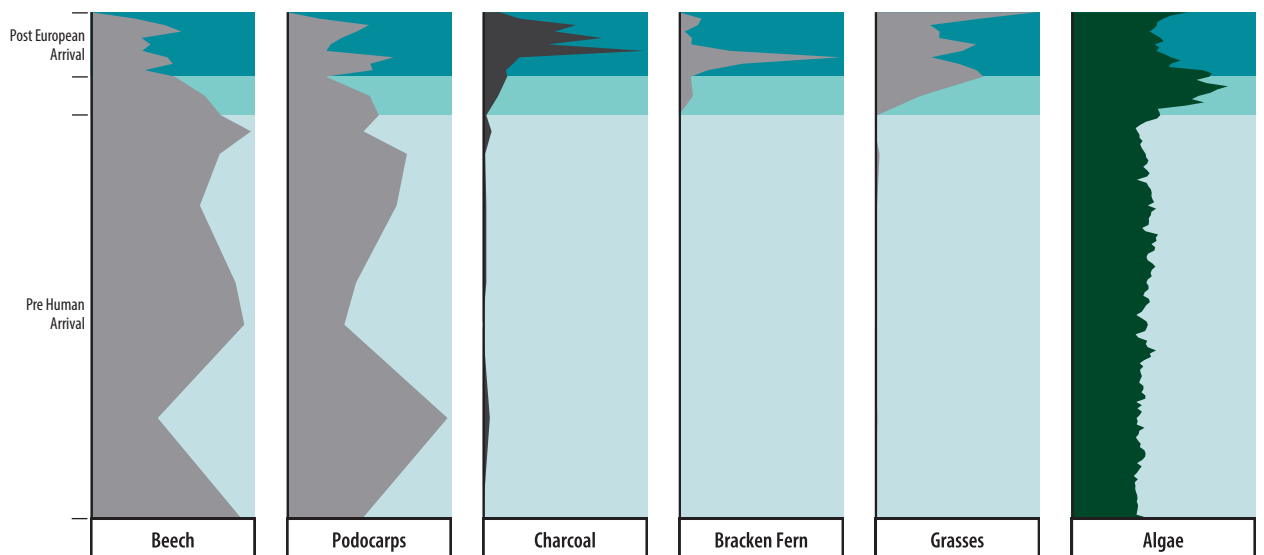
Ōpōrea (or Lake Pearson) is a highland lake in the upper Waimakariri River catchment. It was a valued mahinga kai (food bowl) among local Māori. The lake has clear water, but nutrient levels are slightly elevated.

The initial results from the sediment core suggest that prior to human arrival beech and podocarp forest was abundant around the lake and in the wider 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, forest clearance intensified and native vegetation was replaced by pastoral land.

Algae have always been present in the lake, but their abundance increased post human settlement. Algal levels have stabilised following the initial rise.

POLLEN, CHARCOAL AND ALGAE LEVELS FOR THE PAST ~4000 YEARS



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