

Future of Norfolk Pine Trees on Esplanade

In recent times the construction of the Link Pathway and other proposed or potential works along the seaward side of the Esplanade in Kaikōura has stimulated some discussion in the community regarding the 57 Norfolk Pine trees that are present along the foreshore.

The Norfolk Pine tree species is an evergreen conifer that is native to Norfolk Island, which was subsequently widely distributed by European mariners. Despite its name, it is not a member of the pine tree family but is instead related to the ‘Monkey Puzzle Tree’ of South America.

Such trees were also planted at several other coastal locations in NZ, taking advantage of the tree’s high tolerance for salty and windy conditions.

The trees in Kaikōura have however clearly not thrived. In 2021 Council obtained an arborists report on the condition and potential management of these trees. This report concluded that of these trees only 14 were in a good condition, and that most were struggling in a difficult and restricted growing environment.

Under ideal conditions such trees can live for as much as 150 years, reaching heights of 50 to 60 metres. Though the trees along the Esplanade are believed to be between 100 and 115 years old and are approaching the end of their lives, only 2 trees of the 57 that are present have achieved even half of this potential height.

A number of factors are identified in the arborists report and elsewhere that have potentially contributed to this limited growth and in some cases current poor condition, including:

- Ground compaction around the trees.
- Proximity and extent of built structures (in particular the road, from which rainfall is captured and drained away rather than being discharged into the ground).
- Uplift of ground in the 2016 earthquake and associated effects on ground water level.
- Poor, rapidly draining ground conditions. Being planted on a foreshore where there is only a thin cover of soil above gravels there are limited nutrients available.

Many of these factors are long-standing, presumably going back to when the Esplanade took its current form (believed to be in the 1970’s) and cannot be readily addressed. Whilst the arborist’s report suggests some measures that might be beneficial for the trees, because of the large numbers of trees present and their close proximity to the road any such significant program of maintenance or protection works is likely to have a very substantial cost, probably upwards of a hundred thousand dollars, and the benefits would be uncertain and only temporary.

Further deterioration of the trees seems inevitable because of their advanced age and it is therefore believed that a more appropriate strategy would be to start planning for the future replacement of these trees, either with new Norfolk Pines or another species, perhaps with such replacement commencing within the period of Council’s forthcoming 2024-2033 Long Term Plan.

Whilst it is recognised that the Norfolk Pines along the Esplanade have an iconic quality, as was the case with recent discussion regarding the old Kaikōura Wharf, it must be accepted that some such iconic assets cannot be preserved indefinitely, and that at some point removal or replacement will be required. This too would be expected to have a substantial cost – again potentially hundreds of thousands of dollars.

As was the case for the old wharf it is believed that the community should be consulted before any decisions are made on potential future removal or replacement of the Norfolk Pines, and development of Council’s forthcoming Long-Term Plan will provide an opportunity for this.

Effects of Link Pathway

Whilst sections of the link pathway will be constructed above areas of ground that contain roots of the Norfolk Pines (which are likely to extend for substantial distances away from the trunks of the trees) the path will not restrict the moisture available to the trees.

This is because unlike the road – from which rainfall runs off via drains directly into the sea – runoff from the path will soak into the ground on either side of it, making it available for the trees.

Where the path needs to go close to the trees special arrangements will be made to protect and the tree roots that are near to the surface.