

Appendix H. Memorandum on Carbon Forestry and Shading

WAIMAKARIRI DISTRICT COUNCIL

MEMO

FILE NO AND TRIM NO: File Number / Trim Number

DATE:

MEMO TO: Mark Buckley, Principal Policy Planner
Matt Bacon, Development Planning Manager

FROM: Neil Sheerin, Senior Policy Planner

SUBJECT: Carbon forestry and shading of roads

I was asked on Wednesday 2 August 2023 to investigate the extent to which 'carbon forestry' is conducted in the District, and further afield. My understanding of the background to this is as follows. The Proposed Plan includes provisions aimed at preventing shading of roads by roadside vegetation causing hazardous icy conditions on the road surface. The relevant rules incorporate the term 'woodlot' which refers (in summary) to stands of trees for various purposes, including 'a carbon sink'. Submissions on the Proposed Plan have raised concern about such provisions, including from Federated Farmers who wish reference to carbon forestry (or similar) to be deleted from such provisions and instead prefer to wait for central government direction.

With regards carbon forestry, there are significant central government initiatives in this area, particularly in relation to the role of forestry (exotic and native) in the emissions trading scheme. The District Council's Strategy Team are currently preparing a submission in this regard. However, they have verbally advised me that, at this stage, there is no information on whether 'carbon forestry' is conducted in the District, or its extent.

From a brief review of other district plans, carbon forestry does not appear to be a matter addressed in district plans. Some councils have involvement in plantation forestry as they may manage forested lands within their districts or regions, however this tends to be outside the context of a statutory instrument like a district plan. There is existing plantation forestry in the District, notably in Tuhaitara Coastal Park in the east of the District, being managed by Te Kohaka o Tuhaitara Trust.

I understand from my experience with drafting the Open Space and Recreation Zone provisions, that Tuhaitara Trust undertake planting for carbon sequestration purposes as part of its management of Tuhaitara Coastal Park. However, I am unaware of what this may actually comprise – for example, is it permanent native or exotic forest, wetland planting, dune planting, or any combination of these. In Tuhaitara Coastal Park, while this may include trees, it will likely include other types of vegetation, and this is unlikely to occur in roadside situations. Planting for carbon sequestration may occur in other parts of the District, but at this stage, as I alluded to above, there is no information on this, or its extent.

My view is that in the context of preventing shading of roads by roadside vegetation causing hazardous icy conditions on the road surface, the issue of 'carbon forestry' is a 'red herring'. The 'real' issue seems to be whether provisions in a district plan aimed at preventing shading of roads by roadside vegetation causing hazardous icy conditions on the road surface, are common and/or justified.

From experience it is an issue in this District. For example, there is a high macrocarpa hedge running for several kilometres along the northern side of South Eyre Road, which results in the road remaining in shade during the day in winter and causing icy conditions on the road surface to persist.

I have undertaken a review of relevant district plan provisions of the other 9 local authorities in the Canterbury region. I have limited this to Canterbury, as from experience if this matter was being considered by our councillors they would likely be mainly interested in what our 'neighbours' do. From this, the following general trends can be drawn:

- 6 out of the other 'neighbouring' 9 Canterbury local authorities have rules aimed at preventing shading of roads by roadside vegetation causing hazardous icy conditions on the road.
- The rules are mostly located in rules for the Rural Zone. However, in one District Council the rule is located in the District-wide Transport rules.
- The rules mostly relate to any road. However, in one District, the rule relates only to a State Highway running through one type of rural zone.
- The rules mostly target 'trees', 'trees and vegetation', or 'vegetation', and include shelterbelts, plantation forestry, and woodlots. The concern being long linear stands of trees or other high vegetation parallel to roads rather than a single tree or a line of low shrubs.
- The rules invariably require that vegetation does not cause shading of the road between 10am and 2pm on the shortest day of the year. (From experience this is the rule most commonly used throughout the country to address this issue. Where this is applied it has resulted in plantation forestry, for example, being set back several hundred metres. Where an approach such as this is not used, this can result in roads being shaded during winter for the whole day.) The rule is usually not restricted to one side of the road, but rather is concerned about avoiding shading in the circumstances described.
- One council provides an exemption for situations where existing topography already causes shading of the road without the vegetation to be planted.
- One council requires shelterbelts on road boundaries to be set back by 300m, and on internal boundaries to be planted at a 90 degree angle to the road and be at least 1km apart.
- Of the 3 other 'neighbouring' councils that do not have rules aimed at preventing shading of roads by roadside vegetation causing hazardous icy conditions on the road:
 - One council has requirements aimed at preventing shading of buildings on adjoining sites, or requires exotic plantings to be set back from rivers, lakes and wetlands;

- One council has controls on the location of amenity planting, woodlots, shelterbelts and plantation forestry, but only in relation to either not penetrating airfield take off / approach paths, or being set back from buildings on adjoining sites to mitigate wildfire hazard;
- One council has no rules on location of plantings in any circumstances.