

**Submission
No 47**

**INQUIRY INTO THE PROTECTIONS WITHIN THE VICTORIAN
PLANNING FRAMEWORK**

Name: Dr Ken Marriott

Date Received: 27 January 2022

SUBMISSION TO ENVIRONMENT & PLANNING COMMITTEE RE THE PROTECTIONS WITHIN THE VICTORIAN PLANNING FRAMEWORK

Specific Focus: Terms of Reference 2: environmental sustainability and vegetation protection

Dr Ken Marriott

1. PREAMBLE:

World-wide and Australia-specific scientific research into climate change and its causes has demonstrated that the earth will warm by 3°C or more unless CO₂ and other greenhouse gas emissions are stopped by 2050 and unless the hundreds of billions of tonnes of excess greenhouse gases *already in the atmosphere* are removed.

Despite the assurances of the Australian Federal government, the technology which is touted as solving both current and past emissions, has yet to be proven from a commercial perspective; is presently only being applied at the point of concentrated industrial and mining emissions, and is extremely expensive. Yet funding of research into this area should continue as success could offer the capacity to initiate immediate capture of climate change gases without the wait for the gains to be made from tree planting initiatives. Technology may also offer the capacity to trap other non-carbon greenhouse gases.

To date, the only known effective means of carbon sequestration presently available is through living vegetation. Terrestrial and marine vegetation captures and locks in billions of tonnes of carbon annually. Research in the UK has demonstrated that in that country, the trees that are most effective in capturing and locking in CO₂ and other greenhouse gases are 350 year old oak trees. Yet Victoria's local and state governments are still approving the removal and harvesting of ancient native forests, still allowing the removal of mature trees to facilitate higher density residential developments and not requiring effective tree replacement levels where there is no other option than to remove trees. Little appears to be underway to protect fragile marine environments.

It is evident that humanity does not have 350 years for trees or other plants to reach their optimal capacity in sequestering climate change gases, as identified by the UK research. As such, all existing vegetation must be given high levels of protection if our environment is to be sustained, and both large areas of additional vegetation and more environmentally-effective vegetation types must be planted as quickly as possible.

2. BROAD ACTION RECOMMENDATIONS

In light of the Preamble, a number of broad recommendations are put the Committee. These can be detailed further if needed. They are:

- 2.1 Fund research into and the development, promotion of and availability of tree species which have the ability to resist emerging weather and climate changes
- 2.2 Require leisure provision agencies to revise their classifications of open space to include what might be termed “revegetation reserves” in addition to (and where appropriate/more effective, as a replacement of) informal urban parks and gardens
- 2.3 Re-establish marine, coastal and other wetlands wherever possible, particularly those able to accommodate the regeneration of mangrove forests
- 2.4 Where former wetlands have been filled for the development of playing fields, fund the installation of synthetic playing fields (which can support around four times the use rates per week/year as they do not need to be furloughed as do grass fields) as an alternative to some of the grassed playing fields and return the “released” the grassed playing fields to wetlands and/or reforested areas
- 2.5 Similarly, where former wetlands have been filled for other sporting facilities (such as golf courses, race tracks etc), identify areas within these sites that can be returned to wetlands/bush/forest cover without impacting detrimentally on the recreational uses
- 2.6 Conduct an assessment of 9 and 18 hole golf courses and the levels and patterns of their use on a regional functional catchments basis and use this analysis to define a hierarchy of courses. Use this hierarchy to identify (a) 9 and 18 hole golf courses which can be closed and revegetated and (b) 18 hole courses which can be reduced to 9 holes so that the remaining land can be returned to bushland/wetlands/forest
- 2.7 Ban any future clearing of native vegetation on private farmland and of trees above a research-determined size in new residential estates and in older existing residential areas undergoing higher density redevelopment
- 2.8 Revise new residential estate and residential /house block redevelopment guidelines to ensure that shrub and tree species that are resistant to climate change are retained and can be planted
- 2.9 Increase the level of provision and the size of provision units of open space in new residential areas so that meaningful greenhouse gas abatement plantings can be undertaken
- 2.10 Initiate an immediate ban on the clearing of native vegetation on crown and local government land including along existing and new road reserves
- 2.11 Institute a policy whereby any trees of an agreed size or age (as relevant to the species) that are removed have to be replaced by a scientifically determined number (and type) of *trees that matches the amount of sequestration of climate change gases of the tree(s) that are removed at the date of removal.* Replacement plantings can occur in any of the designated reforestation sites identified through other initiatives recommended here

2.12 Fund local government bodies and direct state government agencies to identify a variety of settings for, and commence the development of, regional vegetation/ woodland/wetland/forest regeneration properties. All agencies should be encouraged to give the development of these areas priority for action ahead of urban street tree and canopy planting

2.13 As part of recommendation 2.12, fund research into marginal farming lands and identify areas suitable for buybacks and revegetation. Assist former farming families in relocating to more sustainable communities

2.14 Fund local government to research and identify parcels of land within their own boundaries which are of a sufficient size and condition to support meaningful levels of climate change gases sequestration through tree planting using the species identified and developed through the research recommended earlier, and

2.15 Only permit the development of new non-pedestrian trails, routes (such as mountain bike trails) in state parks and ban their development in National Parks.

Ken Marriott has a PhD in Geography from Monash University. He lectured in and conducted research into climatology and micro-meteorology in the 1960s and 70s and has updated some of that research in recent years. He also lectured in urban recreation and open space planning and over the period 1984-2016 was managing director of HM Leisure Planning Pty Ltd, a leading national leisure planning consultancy. He has written widely on leisure and open space planning and has had planning texts published by most Australian state governments and most recently by Routledge in the UK.